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<212> DNA

<213> Homo sapiens

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 <212> DNA
 <213> Homo sapiens

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 <212> DNA
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 <213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<210> 2899

<211> 2369

<212> DNA

<213> Homo sapiens

<220>

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<210> 2900

<211> 871

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1) ... (871)

<223> n = a,t,c or g

<400> 2900

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<210> 2901

<211> 1501

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1) ... (1501)

<223> n = a, t, c or g

<400> 2901

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a

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<210> 2902

<211> 772

<212> DNA

<213> Homo sapiens

<400> 2902

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catttgcgac ttcgttcctt tgggtgactt gttcacacag gccagcttcc catccaagac      720
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<210> 2903

<211> 770

<212> DNA

<213> Homo sapiens

<400> 2903

```

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<210> 2904

<211> 3410

<212> DNA

<213> Homo sapiens

<400> 2904

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<210> 2905

<211> 1811

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

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<223> n = a,t,c or g

<400> 2905

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<210> 2906
 <211> 627
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1) ... (627)
 <223> n = a,t,c or g

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<210> 2907
 <211> 3918
 <212> DNA
 <213> Homo sapiens

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 <213> Homo sapiens

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<211> 422

<212> DNA

<213> Homo sapiens

<220>

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<223> n = a,t,c or g

<400> 2909

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<211> 1119

<212> DNA

<213> Homo sapiens

<400> 2910

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 <211> 1347
 <212> DNA
 <213> Homo sapiens

<400> 2911

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 <211> 2012
 <212> DNA
 <213> Homo sapiens

<400> 2912

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<210> 2913

<211> 382

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

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<223> n = a,t,c or g

<400> 2913

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<210> 2914

<211> 1855

<212> DNA

<213> Homo sapiens

<400> 2914

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<210> 2915
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 <212> DNA
 <213> Homo sapiens

<400> 2915						
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<210> 2916
 <211> 379
 <212> DNA
 <213> Homo sapiens

<400> 2916						
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<210> 2917
 <211> 1053
 <212> DNA
 <213> Homo sapiens

<400> 2917
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<210> 2918
 <211> 1409
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(1409)
 <223> n = a,t,c or g

<400> 2918
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 agagtgcctg tccctaccac catccggagt ggcctctctg tcagtgtgtg atgtggccag 240
 ggcagtgtcc acctgaaact cctcctcatc ggactgaaca acgggggact cccaccctc 300
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 ccctaaggcg ggggacagca cagtgttctc ttctcctcca gagttcagga agacgtccag 480
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<210> 2919
 <211> 396
 <212> DNA
 <213> Homo sapiens

<400> 2919
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 aaacagtctt tgcaagaatg gaatccgtaa aacaaaggat tttggcccca ggaaaagagg 180
 ggctaaagaa ttttgctgga aaatcactcg gccagatcta cagggtgctg gagaagaagc 240
 aagacaccgg ggagacaatc gagctgacgg aggatgggaa gcccctatag gtgcccgaga 300
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<210> 2920
 <211> 1077
 <212> DNA
 <213> Homo sapiens

<400> 2920
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 catcaacttt ctaaaacatc aagaaaagct ctctatacaa ataccatggc cgattataat 180
 tattttgttt tccatccttt taaaaatatt ttctgctttg catcccatta ttattttgag 240
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 acgttttgat gcttagctga aaaattacaa taaattctcc aatgaaatta tgtatcttta 360
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<210> 2921
 <211> 910
 <212> DNA
 <213> Homo sapiens

<400> 2921
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 agcggcaaga gccggcgagg cggcgcgagg agcggcgcc cgtccaccaa cggcgggctg 300
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<210> 2922
 <211> 513
 <212> DNA
 <213> Homo sapiens

<400> 2922	
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ggagctctat	cgtcgaaaca gatttgcctc ttc 513

<210> 2923
 <211> 412
 <212> DNA
 <213> Homo sapiens

<400> 2923	
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tgtgccaaata	tccagattgc ataggcgagt tgtcattaca ggcattggct tagtgactcc 240
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ttcactgggt	gtggaagagt ataagagtat cccttgcagt gttgctgctt atgtgccaaag 360
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<210> 2924
 <211> 746
 <212> DNA
 <213> Homo sapiens

<400> 2924	
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tcctaagaac	ctttaactcg gaactctgtt ggggtggagg gccctctttt tcagccggtg 120
tcttgccctc	cattctccct tcatcctgct caacaccccg aagctgggtga aaacagcaga 180
gctgcccccg	gatcggaact acgtgctggg cgcccaccct catgggatca tgtgtacagg 240
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gctcgggcag	gccgtggtca tcatggtggg ggggtgcgcac gaggcctgtt attcagtcct 480
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ctctccttgc	atcttctggg	gtcgcggtct	cttctcagcc	acctcctggg	gcctgctgcc	720
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<210> 2925
 <211> 793
 <212> DNA
 <213> Homo sapiens

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<210> 2926
 <211> 705
 <212> DNA
 <213> Homo sapiens

<400> 2926						
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cacaagatcc	tgggcaatac	cttcggcatg	tgtgtgctgc	aggattttga	agccttaact	600
ccaaacttgc	tggccaggac	tgtagaaaca	gtggaagggtg	gtgggctagt	ggatcatcctc	660
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<210> 2927
 <211> 723
 <212> DNA
 <213> Homo sapiens

<400> 2927						
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agatggcggc	tggcgagct	gtcgtgcgg	cgcccgagtg	cggcttctc	ccctacgcgc	180
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caaatgacca atcttcaaga tggctcttcag agagcaacta tcctccccag tacttgattc 300
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atgtttgcaa tttgaagaaa tttaaagtct ttggtggaat gaatgaagaa aatatgacag 420
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tagtacaacc ttgtctcaac tggtagtagc agtaccgtga acaggaagct attcgctttt 660
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cct

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<210> 2928
<211> 637
<212> DNA
<213> Homo sapiens

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```

<220>
<221> misc_feature
<222> (1) ... (637)
<223> n = a,t,c or g

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<400> 2928
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gtacttttcc ggcccttcgg atacagcaaa ttcttcaaac caagatgcat tgcctcttaa 420
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ataataggac aggacacaga gctggaatat tggagtttgg ggtataaaac actcctccct 540
gccccatta gtatttatat tgatctttca gacctacttt agtaaaaaaa accatggccc 600
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<210> 2929
<211> 367
<212> DNA
<213> Homo sapiens

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<400> 2929
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gcgccgctcc atataccgct gcagcagcga cgtcttcccc acgttcatgt ccccaggag 180
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tctccccgag gctggccggc tcgtgcgccc tgggcgcagc tggaggagcg gaccccgagc 300
tcgcccgggac ccggaattctc gtgaacgctc cgggaccttc gcctccggac gcccgggagc 360
tcaagag

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```

<210> 2930
<211> 7545
<212> DNA
<213> Homo sapiens

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<220>
<221> misc_feature
<222> (1) ... (7545)
<223> n = a,t,c or g

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<212> DNA

<213> Homo sapiens

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<210> 2940

<211> 1922

<212> DNA

<213> Homo sapiens

<400> 2940

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<211> 5418

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)... (5418)

<223> n = a,t,c or g

<400> 2941

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<211> 436

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

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<400> 2942

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<211> 545

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(545)

<223> n = a,t,c or g

<400> 2943

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<210> 2944
 <211> 1852
 <212> DNA
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 <211> 6046
 <212> DNA
 <213> Homo sapiens

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<210> 2946
 <211> 595
 <212> DNA
 <213> Homo sapiens

<400> 2946						
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aagatgaagt	cacttggcac	accttttttg	tcaggttggg	gagacagaga	aagatcggtc	420
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<210> 2947
 <211> 419
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1) ... (419)
 <223> n = a,t,c or g

<400> 2947						
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<210> 2948

<211> 419

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(419)

<223> n = a,t,c or g

<400> 2948

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<210> 2949

<211> 1546

<212> DNA

<213> Homo sapiens

<400> 2949

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<210> 2950

<211> 1585

<212> DNA

<213> Homo sapiens

<400> 2950

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<210> 2951

<211> 883

<212> DNA

<213> Homo sapiens

<400> 2951

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<210> 2952

<211> 441

<212> DNA

<213> Homo sapiens

<400> 2952

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<210> 2953

<211> 108

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(106)

<223> Xaa = any amino acid or nothing

<400> 2953

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      20           25           30
Leu Met Leu Cys Gly Trp Thr Ile Leu Leu Thr Leu Thr Met Val Gln
      35           40           45
Gly Glu Pro Xaa Gly Pro Lys Gly Ile Pro Gly Phe His Thr Asn Ser
      50           55           60
Ser Tyr Pro His Trp Gly Thr Val Ala Lys Pro Pro Ala Gly Asp Xaa
      65           70           75           80
Asp Leu Leu Pro Ala Pro Gly Gln Glu Gly Thr Pro Leu Phe Thr Arg
      85           90           95
Xaa Ser Leu Cys Thr Tyr Cys Pro Ile Asp
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<210> 2954

<211> 150

<212> PRT

<213> Homo sapiens

<400> 2954

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Phe Tyr Arg Ala Phe Gln Val Ile Gln Leu Ser Leu Pro Glu Asp Gln
      35           40           45
Lys Leu Ser Ile Thr Ala Ala Thr Val Gly Gln Ser Ala Val Leu Ser
      50           55           60
Cys Ala Ile Gln Gly Thr Leu Arg Pro Pro Ile Ile Trp Lys Arg Asn
      65           70           75           80
Asn Ile Ile Leu Asn Asn Leu Asp Leu Glu Asp Ile Asn Asp Phe Gly
      85           90           95
Asp Asp Gly Ser Leu Tyr Ile Thr Lys Val Thr Thr Thr His Val Gly
      100           105           110
Asn Tyr Thr Cys Tyr Ala Asp Gly Tyr Glu Gln Val Tyr Gln Thr His

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      115      120      125
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Gln Ala Arg Arg Ala Gly
145      150

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<210> 2955
<211> 58
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(58)
<223> Xaa = any amino acid or nothing

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<400> 2955
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      20      25      30
Ser Val Ile Ala Asp Pro Arg Gly Asn Thr Leu Gly Arg Gly Thr Thr
      35      40      45
Ile Thr Xaa Val Ser Ile Pro Pro Ser Leu
 50      55      58

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<210> 2956
<211> 164
<212> PRT
<213> Homo sapiens

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<400> 2956
Arg Thr Lys Thr Asp Val Tyr Ile Leu Asn Leu Ala Val Ala Asp Leu
 1      5      10      15
Leu Leu Leu Phe Thr Leu Pro Phe Trp Ala Val Asn Ala Val His Gly
      20      25      30
Trp Val Leu Gly Lys Ile Met Cys Lys Ile Thr Ser Ala Leu Tyr Thr
      35      40      45
Leu Asn Phe Val Ser Gly Met Gln Phe Leu Ala Cys Ile Ser Ile Asp
 50      55      60
Arg Tyr Val Ala Val Thr Lys Val Pro Ser Gln Ser Gly Val Gly Lys
 65      70      75      80
Pro Cys Trp Ile Ile Cys Phe Cys Val Trp Met Ala Ala Ile Leu Leu
      85      90      95
Ser Ile Pro Gln Leu Val Phe Tyr Thr Val Asn Asp Asn Ala Arg Cys
      100      105      110
Ile Pro Ile Phe Pro Arg Tyr Leu Gly Thr Ser Met Lys Ala Leu Ile
      115      120      125
Gln Met Leu Glu Ile Cys Ile Gly Phe Val Val Pro Phe Leu Ile Met
      130      135      140
Gly Val Cys Tyr Phe Ile Thr Ala Arg Thr Leu Met Lys Met Pro Asn
145      150      155      160
Ile Lys Ile Ser
      164

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<210> 2957
<211> 133

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<212> PRT

<213> Homo sapiens

<400> 2957

Glu	Glu	Thr	Gly	Val	Arg	Glu	Lys	Arg	Arg	Glu	Arg	Met	Lys	Glu	Lys
1				5						10				15	
Met	Trp	Gln	Asn	Val	Leu	Cys	Cys	Thr	Leu	Gln	Thr	Ala	Val	Ile	Leu
			20					25					30		
Lys	Leu	Phe	Gln	Asn	Lys	Val	Leu	Asn	Ile	Leu	Lys	Asn	Phe	Phe	Leu
		35					40					45			
Ser	Pro	Leu	Asp	Thr	Arg	Lys	Asn	Lys	Val	Phe	Lys	Lys	Trp	Ala	Gly
	50					55					60				
Gly	Pro	Gly	Ala	Val	Ala	His	Ala	Cys	Asn	Pro	Ser	Thr	Leu	Gly	Gly
	65				70					75				80	
Arg	Gly	Gly	Arg	Ile	Thr	Lys	Ser	Gly	Asp	Arg	Asp	His	Pro	Gly	Gln
				85					90					95	
His	Gly	Glu	Thr	Arg	Ser	Leu	Pro	Ala	Cys	Trp	Ala	Gln	Trp	Lys	Ser
			100					105					110		
Leu	Ala	Leu	Pro	Val	Ser	Arg	Ala	Pro	Gly	Arg	Gln	Gly	Ser	Leu	Val
		115					120					125			
Val	Phe	Pro	Leu	Pro											
	130				133										

<210> 2958

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2958

Cys	Thr	Lys	Cys	Lys	Ala	Asp	Cys	Asp	Thr	Cys	Phe	Asn	Lys	Asn	Phe
1				5					10					15	
Cys	Thr	Lys	Cys	Lys	Ser	Gly	Phe	Tyr	Leu	His	Leu	Gly	Lys	Cys	Leu
			20					25					30		
Asp	Asn	Cys	Pro	Glu	Gly	Leu	Glu	Ala	Asn	Asn	His	Thr	Met	Glu	Cys
		35					40					45			
Val	Ser	Ile	Val	His	Cys	Glu	Val	Ser	Glu	Trp	Asn	Pro	Trp	Ser	Pro
	50					55					60				
Cys	Thr	Lys	Lys	Gly	Lys	Thr	Cys	Gly	Phe	Lys	Arg	Gly	Thr	Glu	Thr
	65				70					75				80	
Arg	Val	Arg	Glu	Ile	Ile	Gln	His	Pro	Ser	Ala	Lys	Gly	Asn	Leu	Cys
				85					90					95	
Pro	Pro	Thr	Asn	Glu	Thr	Arg	Lys	Cys	Thr	Val	Gln	Arg	Lys	Lys	Cys
			100					105					110		
Gln	Lys	Gly	Glu	Arg	Gly	Lys	Lys	Gly	Arg	Glu	Arg	Lys	Arg	Lys	Lys
		115				120						125			
Pro	Asn	Lys	Gly	Glu	Ser	Lys	Glu	Ala	Ile	Pro	Asp	Ser	Lys	Ser	Leu
	130					135					140				
Glu	Ser	Ser	Lys	Glu	Ile	Pro	Glu	Gln	Arg	Glu	Asn	Lys	Gln	Gln	Gln
145					150					155				160	

<210> 2959

<211> 142

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(141)

<223> Xaa = any amino acid or nothing

<400> 2959

```

Leu Ser Met Leu Ser Thr Ile Ser Thr Glu His Arg Leu Ser Val Leu
 1              5              10              15
Trp Pro Ile Trp Tyr Cys Cys His Cys Pro Thr His Leu Ser Ala Val
              20              25              30
Met Cys Val Leu Leu Trp Ala Leu Ser Leu Leu Gln Ser Ile Leu Glu
              35              40              45
Trp Met Phe Cys Ser Phe Leu Phe Ser Asp Val Asp Ser Asp Asn Trp
              50              55              60
Cys Gln Ile Leu Asp Phe Leu Thr Ala Val Trp Leu Ile Phe Leu Ile
              65              70              75              80
Leu Val Leu Cys Gly Phe Thr Leu Val Leu Leu Val Arg Ile Ile Cys
              85              90              95
Gly Ser Gln Lys Met Pro Leu Thr Arg Leu Tyr Val Thr Ile Leu Leu
              100              105              110
Thr Gly Leu Val Phe Leu Phe Cys Ser Leu Pro Leu Ser Ile Gln Xaa
              115              120              125
Phe Leu Leu Tyr Trp Ile Glu Lys Asp Leu Asp Asp Leu
              130              135              140 141

```

<210> 2960

<211> 116

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(115)

<223> Xaa = any amino acid or nothing

<400> 2960

```

Glu Lys Arg Lys Thr Ser Tyr Ser Gln Cys Leu Asn Ser Lys Gln Arg
 1              5              10              15
Asn Val Ser Met Arg Pro Ser Ile Trp Ile His Val His Leu Lys Pro
              20              25              30
Pro Cys Arg Leu Val Glu Leu Leu Pro Phe Ser Ser Ala Leu Gln Gly
              35              40              45
Leu Ser His Leu Ser Leu Gly Thr Thr Leu Pro Val Xaa Gly His Leu
              50              55              60
Arg Phe Arg Leu Arg Asn Leu Pro Gln Ser Leu Arg Thr Val Ile Leu
              65              70              75              80
Pro Glu Arg Asn Glu Gln Asn Leu Gln Glu Leu Ser His Asn Ala
              85              90              95
Asp Lys Tyr Gln Met Gly Asp Cys Cys Lys Glu Glu Ile Asp Asp Ser
              100              105              110
Ile Phe Tyr
              115

```

<210> 2961

<211> 659

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(657)

<223> Xaa = any amino acid or nothing

<400> 2961

Glu Lys Gly Lys Val Lys Asp Ala Gly Ala Glu Gln Trp Ile Ser Leu
 1 5 10 15
 Ser Leu Ser Cys Lys Gly Ser Trp Glu Thr Gln Phe Ser Asn His Leu
 20 25 30
 Asn Ser Leu Thr Pro Pro Thr Ser Val Arg Arg Met Pro Leu Ile Thr
 35 40 45
 Thr Val Thr Leu Leu Lys Met Val Ala Arg His His Met Lys Leu Leu
 50 55 60
 Cys Ser Lys Ala Phe Ser Thr Gln Leu Gln Gln Lys Ile Phe Leu His
 65 70 75 80
 Ser Gln Met Gly Ile His His Gln Ser Val Cys Met Lys Leu Lys Pro
 85 90 95
 Asn Thr Ser His Ile Ile Ser Ile Leu Met Gly Gln Pro Met Ala Leu
 100 105 110
 Val Gln Leu Glu Thr Leu Ala Pro Leu Thr Ile Ile Ile Gln Lys Phe
 115 120 125
 Gln Thr Gln Asp His Met Lys Phe Trp Lys Asn Leu Pro Leu His Ser
 130 135 140
 His His Leu Thr Pro Ser Val Pro Gln Thr Val Ile Pro Lys Lys Thr
 145 150 155 160
 Gly Ser Pro Glu Ile Lys Leu Lys Ile Thr Lys Thr Ile Gln Asn Gly
 165 170 175
 Arg Glu Leu Phe Glu Ser Ser Leu Cys Gly Asp Leu Leu Asn Glu Val
 180 185 190
 Gln Ala Ser Glu Gln Xaa Asn Gln Ser Ile Glu Ser Arg Lys Glu Lys
 195 200 205
 Arg Lys Lys Ser Asn Lys His Asp Ser Ser Arg Ser Glu Glu Arg Lys
 210 215 220
 Ser His Lys Ile Pro Lys Leu Glu Pro Glu Glu Gln Asn Arg Pro Asn
 225 230 235 240
 Glu Arg Val Asp Thr Val Ser Glu Lys Pro Arg Glu Glu Pro Val Leu
 245 250 255
 Lys Glu Gly Ser Pro Ser Ser Ala Asn Thr Ile Phe Cys Ser Asn Asn
 260 265 270
 Gly Ser Val His Trp Phe Lys Phe Gln Val Gly Asp Leu Val Trp Ser
 275 280 285
 Lys Val Gly Thr Tyr Pro Trp Trp Pro Cys Met Val Ser Ser Asp Pro
 290 295 300
 Gln Leu Glu Val His Thr Lys Ile Asn Thr Arg Gly Ala Arg Glu Tyr
 305 310 315 320
 His Val Gln Phe Phe Ser Asn Gln Pro Glu Arg Ala Trp Val His Glu
 325 330 335
 Lys Arg Val Arg Glu Tyr Lys Gly His Lys Gln Tyr Glu Glu Leu Leu
 340 345 350
 Ala Glu Ala Thr Lys Gln Ala Ser Asn His Ser Glu Lys Gln Lys Ile
 355 360 365
 Arg Lys Pro Arg Pro Gln Arg Glu Arg Ala Gln Trp Asp Ile Gly Ile
 370 375 380
 Ala His Ala Glu Lys Ala Leu Lys Met Thr Arg Glu Glu Arg Ile Glu
 385 390 395 400
 Gln Tyr Thr Phe Ile Tyr Ile Asp Lys Gln Pro Glu Glu Ala Leu Ser
 405 410 415
 Gln Ala Lys Lys Ser Val Ala Ser Lys Thr Glu Val Lys Lys Thr Arg
 420 425 430
 Arg Pro Arg Ser Val Leu Asn Thr Gln Pro Glu Gln Thr Asn Ala Gly
 435 440 445
 Glu Val Ala Ser Ser Leu Ser Ser Thr Glu Ile Arg Arg His Ser Gln
 450 455 460
 Arg Arg His Thr Ser Ala Glu Glu Glu Glu Pro Pro Pro Val Lys Ile
 465 470 475 480
 Ala Trp Lys Thr Ala Ala Ala Arg Lys Ser Leu Pro Ala Ser Ile Thr

```
<210> 2962
<211> 534
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(520)
<223> Xaa = any amino acid or nothing
```

4621

210	215	220
Ser Tyr Thr Thr Glu Ala Thr Arg Arg Met Asn Asp Ile Leu Asn His		
225	230	235
Lys Met Arg Glu Phe Cys Ile Arg Leu Arg Asn Leu Val His Ser Gly		240
	245	250
Ala Thr Lys Gly Glu Ile Ser Ala Thr Gln Asp Val Met Met Glu Glu		255
	260	265
Ile Phe Arg Val Val Cys Ile Cys Leu Gly Asn Pro Pro Glu Thr Phe		270
	275	280
Thr Trp Glu Tyr Arg Asp Lys Asp Lys Asn Asn Lys Lys Ile Gly Pro		285
	290	295
Ile Thr Pro Leu Glu Phe Asn Arg Glu Gln His Val Lys Pro Leu Phe		300
305	310	315
Asn Met Glu Asp Lys Ile Cys Leu Val Asn Asp Pro Arg Pro Gln His		320
	325	330
Lys Tyr Asn Lys Leu Tyr Thr Val Glu Tyr Leu Ser Asn Met Val Trp		335
	340	345
Arg Gly Glu Lys Leu Phe Tyr Asn Asn Gln Pro Ile Asp Phe Leu Lys		350
	355	360
Lys Met Val Ala Ala Ser Ile Lys Asp Gly Glu Ala Val Trp Phe Gly		365
	370	375
Cys Asp Val Gly Lys His Phe Asn Ser Lys Leu Gly Leu Ser Asp Met		380
385	390	395
Asn Leu Tyr Asp His Glu Leu Val Phe Gly Val Ser Leu Lys Asn Met		400
	405	410
Asn Lys Ala Glu Arg Leu Thr Phe Gly Glu Ser Leu Met Thr His Thr		415
	420	425
Met Thr Phe Thr Ala Val Ser Gln Ser Arg Asp Asp Ser Gly Met Val		430
	435	440
Leu Phe Thr Lys Trp Arg Val Gly Glu Phe Gln Trp Gly Glu Asp His		445
	450	455
Gly His Lys Gly Tyr Leu Cys Met Thr Asp Xaa Val Gly Ser Leu Glu		460
465	470	475
Tyr Val Tyr Glu Val Val Val Trp Asp Arg Lys His Val Pro Glu Glu		480
	485	490
Val Leu Ala Val Leu Gly Ala Gly Asn Pro Phe Val Leu Pro Ala Trp		495
	500	505
Asp Pro Met Gly Ala Leu Ala Glu		510
515	520	

<210> 2963

<211> 152

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(150)

<223> Xaa = any amino acid or nothing

<400> 2963

Arg His Tyr Asp Ser Ala Gly Lys Ile Thr Leu Lys Ile Ala Lys Asn	
1	5
Tyr Leu Glu Gln Arg Ala Val Gly Gly Ala Ser Pro Arg Leu Ala Gln	10
	15
	20
Ser Val Leu Thr Cys Ser Arg Glu Pro Ile Leu Glu Asn Ser Leu Thr	25
	30
	35
Ser Leu Ile Glu Tyr Leu His Asn Ala Leu Glu His Asp Met Arg Leu	40
	45
	50
Arg Phe Asn Asn Asp Arg Met Lys Thr Thr Ile Lys Glu Thr Ser Thr	55
	60
65	70
Xaa Leu Ser Asn Ser Tyr Leu Val Phe Pro Leu Met Xaa Ser Leu Thr	75
	80

```
<210> 2964
<211> 821
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(817)
<223> Xaa = any amino acid or nothing
```

4623

Trp
817

<210> 2965
 <211> 821
 <212> PRT
 <213> Homo sapiens

 <221> misc_feature
 <222> (1)...(817)
 <223> Xaa = any amino acid or nothing

<400> 2965
 Phe Asp Thr Tyr Arg Gly Leu Pro Ser Ile Ser Asn Gly Asn Tyr Ser
 1 5 10 15
 Gln Leu Gln Phe Gln Ala Arg Glu Tyr Ser Gly Ala Pro Tyr Ser Gln
 20 25 30
 Arg Ile Ser Ala Ile Thr Thr Val Ser Val Ala Trp Lys Val Leu Ser
 35 40 45
 Gly Lys Ile Gly Glu Gly Ala Glu Gly Asn Cys Lys Cys Val Ile Ser
 50 55 60
 Glu Gly Ala Trp Ala Val Cys Pro Thr Gln Pro Cys Gly Lys Ala Lys
 65 70 75 80
 Pro Asp Lys His Leu Lys Asp Leu Leu Ser Lys Leu Leu Asn Ser Gly
 85 90 95
 Tyr Phe Glu Ser Ile Pro Val Pro Lys Asn Ala Lys Glu Lys Glu Val
 100 105 110
 Pro Leu Glu Glu Met Leu Ile Gln Ser Glu Lys Lys Thr Gln Leu
 115 120 125
 Ser Lys Thr Glu Ser Val Lys Glu Ser Glu Ser Leu Met Glu Phe Ala
 130 135 140
 Gln Pro Glu Ile Gln Pro Gln Glu Phe Leu Asn Arg Arg Tyr Met Thr
 145 150 155 160
 Glu Val Asp Tyr Ser Asn Lys Gln Gly Glu Glu Gln Pro Trp Glu Ala
 165 170 175
 Asp Tyr Ala Arg Lys Pro Asn Leu Pro Lys Arg Trp Asp Met Leu Thr
 180 185 190
 Glu Pro Asp Gly Gln Glu Lys Lys Gln Glu Ser Phe Lys Ser Trp Glu
 195 200 205
 Ala Ser Gly Lys His Gln Glu Val Ser Lys Pro Ala Val Ser Leu Glu
 210 215 220
 Gln Arg Lys Gln Asp Thr Ser Lys Leu Arg Ser Thr Leu Pro Glu Glu
 225 230 235 240
 Gln Lys Lys Gln Glu Ile Ser Lys Ser Lys Pro Ser Pro Ser Gln Trp
 245 250 255
 Lys Gln Asp Thr Pro Lys Ser Lys Ala Gly Tyr Val Gln Glu Glu His
 260 265 270
 Lys Lys Gln Glu Thr Pro Lys Leu Trp Pro Val Gln Leu Gln Lys Glu
 275 280 285
 Gln Asp Pro Lys Lys Gln Thr Pro Lys Ser Trp Thr Pro Ser Met Gln
 290 295 300
 Ser Glu Gln Asn Thr Thr Lys Ser Trp Thr Thr Pro Met Cys Glu Glu
 305 310 315 320
 Gln Asp Ser Lys Gln Pro Glu Thr Pro Lys Ser Trp Glu Asn Asn Val
 325 330 335
 Glu Ser Gln Lys His Ser Leu Thr Ser Gln Ser Gln Ile Ser Pro Lys
 340 345 350
 Ser Trp Gly Val Ala Thr Ala Ser Leu Ile Pro Asn Asp Gln Leu Leu
 355 360 365
 Pro Arg Lys Leu Asn Thr Glu Pro Lys Asp Val Pro Ile Ala Cys Ala
 370 375 380
 Ser Ala Xaa Gly Phe Leu Pro Leu Gln Pro Pro Phe Arg Arg Ile His
 385 390 395 400
 Val Leu Arg Lys Glu Lys Leu Gln Asp Leu Met Thr Gln Ile Gln Gly


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<210> 2966
<211> 494
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(489)
<223> Xaa = any amino acid or nothing
```

<400> 2966

Asp Tyr Val Leu Thr Ala Glu Leu His Arg Gln Arg Ser Pro Gly Val
 1 5 10 15
 Ser Phe Gly Leu Ser Val Phe Asn Leu Met Asn Ala Ile Met Gly Ser
 20 25 30
 Gly Ile Leu Gly Leu Ala Tyr Val Met Ala Asn Thr Gly Val Phe Gly
 35 40 45
 Phe Ser Phe Leu Leu Leu Thr Val Ala Leu Leu Ala Ser Tyr Ser Val
 50 55 60
 His Leu Leu Leu Ser Met Cys Ile Gln Thr Ala Tyr Leu Gly Pro Xaa
 65 70 75 80
 Thr Asn Tyr Phe Met Val Leu Pro Ala His Xaa Leu Thr Cys Leu Pro
 85 90 95
 Leu Ile Glu Phe Leu Gln Ser Leu Xaa Asn Ser Leu Xaa Ala Val Thr
 100 105 110
 Ser Tyr Glu Asp Leu Gly Leu Phe Ala Phe Gly Leu Pro Gly Lys Leu
 115 120 125
 Val Val Ala Gly Thr Ile Ile Ile Gln Asn Ile Gly Ala Met Ser Ser
 130 135 140
 Tyr Leu Leu Ile Ile Lys Thr Glu Leu Pro Ala Ala Ile Ala Glu Phe
 145 150 155 160
 Leu Thr Gly Asp Tyr Ser Arg Tyr Trp Tyr Leu Asp Gly Gln Thr Leu
 165 170 175
 Leu Ile Ile Ile Cys Val Gly Ile Val Phe Pro Leu Ala Leu Leu Pro
 180 185 190
 Lys Ile Gly Phe Leu Gly Tyr Thr Ser Ser Leu Ser Phe Phe Met
 195 200 205
 Met Phe Phe Ala Leu Val Val Ile Ile Lys Lys Trp Ser Ile Pro Cys
 210 215 220
 Pro Leu Thr Leu Asn Tyr Val Glu Lys Gly Phe Gln Ile Ser Asn Val
 225 230 235 240
 Thr Asp Asp Cys Lys Pro Lys Leu Phe His Phe Ser Lys Glu Ser Ala
 245 250 255
 Tyr Ala Leu Pro Thr Met Ala Phe Ser Phe Leu Cys His Thr Ser Ile
 260 265 270
 Leu Pro Ile Tyr Cys Glu Leu Gln Ser Pro Ser Lys Lys Arg Met Gln
 275 280 285
 Asn Val Thr Asn Thr Ala Ile Ala Leu Ser Phe Leu Ile Tyr Phe Ile
 290 295 300
 Ser Ala Leu Phe Gly Tyr Leu Thr Phe Tyr Asp Gly Thr Thr Lys Ala
 305 310 315 320
 Gln Arg Gly Glu Val Thr Cys His Arg Ile Lys Asp Lys Val Glu Ser
 325 330 335
 Glu Leu Leu Lys Gly Xaa Xaa Xaa Ile Pro Xaa Ser His Asp Val Val
 340 345 350
 Val Met Thr Val Lys Leu Cys Ile Leu Phe Ala Val Leu Leu Thr Val
 355 360 365
 Pro Leu Ile His Phe Pro Ala Arg Lys Ala Val Thr Met Met Phe Phe
 370 375 380
 Ser Asn Phe Pro Phe Ser Trp Ile Arg His Phe Leu Ile Thr Leu Ala
 385 390 395 400
 Leu Asn Ile Ile Ile Val Leu Leu Ala Ile Tyr Val Pro Asp Ile Arg
 405 410 415
 Asn Val Phe Gly Val Val Gly Ala Ser Thr Ser Thr Cys Leu Ile Phe
 420 425 430
 Ile Phe Pro Gly Leu Phe Tyr Leu Lys Leu Ser Arg Glu Asp Phe Leu
 435 440 445
 Ser Trp Lys Lys Leu Gly Val Gly Cys Phe Cys Leu Leu Ser Phe Lys
 450 455 460
 Thr Ser Ile Leu Arg Asn Ser Leu Ser Val Tyr Ile Ile Leu Pro Ala
 465 470 475 480
 Ser Arg Lys Ser Ile Tyr Phe Lys Ile

<210> 2967
 <211> 1076
 <212> PRT
 <213> Homo sapiens

 <221> misc_feature
 <222> (1)...(1072)
 <223> Xaa = any amino acid or nothing

<400> 2967
 Ser Gly Ile Val Val Arg Ala Leu Trp Arg Glu Lys Lys Pro Gly Gly
 1 5 10 15
 Gly Arg Arg Val Lys Arg Arg Asn Pro Gly Arg Gln Ala Val Gly His
 20 25 30
 Thr Glu Glu Asp Pro Pro Arg Val Gly Thr Pro Trp Lys Glu His Thr
 35 40 45
 Gly Pro Gly Pro Gln Glu Gly Ser Thr Met Glu Ala Ala His Ala Lys
 50 55 60
 Thr Thr Glu Glu Cys Leu Ala Tyr Phe Gly Val Ser Glu Thr Thr Gly
 65 70 75 80
 Leu Thr Pro Asp Gln Val Lys Arg Asn Leu Glu Lys Tyr Gly Leu Asn
 85 90 95
 Glu Leu Pro Ala Glu Glu Gly Lys Thr Leu Trp Glu Leu Val Ile Glu
 100 105 110
 Gln Phe Glu Asp Leu Leu Val Arg Ile Leu Leu Leu Ala Ala Cys Ile
 115 120 125
 Ser Phe Val Leu Ala Trp Phe Glu Glu Gly Glu Glu Thr Ile Thr Ala
 130 135 140
 Phe Val Glu Pro Phe Val Ile Leu Leu Ile Leu Ile Ala Asn Ala Ile
 145 150 155 160
 Val Gly Val Trp Gln Glu Arg Asn Ala Glu Asn Ala Ile Glu Ala Leu
 165 170 175
 Lys Glu Tyr Glu Pro Glu Met Gly Lys Val Tyr Arg Ala Asp Arg Lys
 180 185 190
 Ser Val Gln Arg Ile Lys Ala Arg Asp Ile Val Pro Gly Asp Ile Val
 195 200 205
 Glu Val Ala Val Gly Asp Lys Val Pro Ala Asp Ile Arg Ile Leu Ala
 210 215 220
 Ile Lys Ser Thr Thr Leu Arg Val Asp Gln Ser Ile Leu Thr Gly Glu
 225 230 235 240
 Tyr Val Ser Val Ile Lys His Thr Glu Pro Val Pro Asp Pro Arg Ala
 245 250 255
 Val Asn Gln Asp Lys Lys Asn Met Leu Phe Ser Gly Thr Asn Ile Ala
 260 265 270
 Ala Gly Lys Ala Leu Gly Ile Val Ala Thr Thr Gly Val Gly Thr Glu
 275 280 285
 Ile Gly Lys Ile Arg Asp Gln Met Ala Ala Thr Glu Gln Asp Lys Thr
 290 295 300
 Pro Leu Gln Gln Lys Leu Asp Glu Phe Gly Glu Gln Leu Ser Lys Val
 305 310 315 320
 Ile Ser Leu Ile Cys Val Ala Val Trp Leu Ile Asn Ile Gly His Phe
 325 330 335
 Asn Asp Pro Val His Gly Gly Ser Trp Phe Arg Gly Ala Ile Tyr Tyr
 340 345 350
 Phe Lys Ile Ala Val Ala Leu Ala Val Ala Ala Ile Pro Glu Gly Leu
 355 360 365
 Pro Ala Val Ile Thr Thr Cys Leu Ala Leu Gly Thr Arg Arg Met Ala
 370 375 380
 Lys Lys Asn Ala Ile Val Arg Ser Leu Pro Ser Val Glu Thr Leu Gly

385					390					395				400
Cys	Thr	Ser	Val	Ile	Cys	Ser	Asp	Lys	Thr	Gly	Thr	Leu	Thr	Thr
				405					410					415
Gln	Met	Ser	Val	Cys	Lys	Met	Phe	Ile	Ile	Asp	Lys	Val	Asp	Gly
			420					425					430	
Ile	Cys	Leu	Leu	Asn	Glu	Phe	Ser	Ile	Thr	Gly	Ser	Thr	Tyr	Ala
		435					440					445		Pro
Glu	Gly	Glu	Val	Leu	Lys	Asn	Asp	Lys	Pro	Val	Arg	Pro	Gly	Gln
		450				455					460			Tyr
Asp	Gly	Leu	Val	Glu	Leu	Ala	Thr	Ile	Cys	Ala	Leu	Cys	Asn	Asp
465					470					475				480
Ser	Leu	Asp	Phe	Asn	Glu	Ala	Lys	Gly	Val	Tyr	Glu	Lys	Val	Gly
				485					490					495
Ala	Thr	Glu	Thr	Ala	Leu	Thr	Thr	Leu	Val	Glu	Lys	Met	Asn	Val
			500					505					510	Phe
Asn	Thr	Asp	Val	Arg	Ser	Leu	Ser	Lys	Val	Glu	Arg	Ala	Asn	Ala
		515					520					525		Cys
Asn	Ser	Val	Ile	Arg	Gln	Leu	Met	Lys	Lys	Glu	Phe	Thr	Leu	Glu
		530					535					540		Phe
Ser	Arg	Asp	Arg	Lys	Ser	Met	Ser	Val	Tyr	Cys	Ser	Pro	Ala	Lys
545					550					555				560
Ser	Arg	Ala	Ala	Val	Gly	Asn	Lys	Met	Phe	Val	Lys	Gly	Ala	Pro
				565					570					575
Gly	Val	Ile	Asp	Arg	Cys	Asn	Tyr	Val	Arg	Val	Gly	Thr	Thr	Arg
			580					585					590	Val
Pro	Leu	Thr	Gly	Pro	Val	Lys	Glu	Lys	Ile	Met	Ala	Val	Ile	Lys
		595					600					605		Glu
Trp	Gly	Thr	Gly	Arg	Asp	Thr	Leu	Arg	Cys	Leu	Ala	Leu	Ala	Thr
		610					615					620		Arg
Asp	Thr	Pro	Pro	Lys	Arg	Glu	Glu	Met	Val	Leu	Asp	Asp	Ser	Ala
625					630					635				640
Phe	Leu	Glu	Tyr	Glu	Thr	Asp	Leu	Thr	Phe	Val	Gly	Val	Val	Gly
				645					650					655
Leu	Asp	Pro	Pro	Arg	Lys	Glu	Val	Thr	Gly	Ser	Ile	Gln	Leu	Cys
		660						665					670	Arg
Asp	Ala	Gly	Ile	Arg	Val	Ile	Met	Ile	Thr	Gly	Asp	Asn	Lys	Gly
		675					680					685		Thr
Ala	Ile	Ala	Ile	Cys	Arg	Arg	Ile	Gly	Ile	Phe	Gly	Glu	Asn	Glu
		690					695					700		Glu
Val	Ala	Asp	Arg	Ala	Tyr	Thr	Gly	Arg	Glu	Phe	Asp	Asp	Leu	Pro
705					710					715				720
Ala	Glu	Gln	Arg	Glu	Ala	Cys	Arg	Arg	Ala	Cys	Cys	Phe	Ala	Arg
				725					730					735
Glu	Pro	Ser	His	Lys	Ser	Lys	Ile	Val	Glu	Tyr	Leu	Gln	Ser	Tyr
			740					745					750	Asp
Glu	Ile	Thr	Ala	Met	Thr	Gly	Asp	Gly	Val	Asn	Asp	Ala	Pro	Ala
		755					760					765		Leu
Lys	Lys	Ala	Glu	Ile	Gly	Ile	Ala	Met	Gly	Ser	Gly	Thr	Ala	Val
		770					775					780		Ala
Lys	Thr	Ala	Ser	Glu	Met	Val	Leu	Ala	Asp	Asp	Asn	Phe	Ser	Thr
785					790					795				Ile
Val	Ala	Ala	Val	Glu	Glu	Gly	Arg	Ala	Ile	Tyr	Asn	Asn	Met	Lys
				805					810					Gln
Phe	Ile	Arg	Tyr	Leu	Ile	Ser	Ser	Asn	Val	Gly	Glu	Val	Val	Cys
			820					825					830	Ile
Phe	Leu	Thr	Ala	Ala	Leu	Gly	Leu	Pro	Glu	Ala	Leu	Ile	Pro	Val
		835					840					845		Gln
Leu	Leu	Trp	Val	Asn	Leu	Val	Thr	Asp	Gly	Leu	Pro	Ala	Thr	Ala
		850					855					860		Leu
Gly	Phe	Asn	Pro	Pro	Asp	Leu	Asp	Ile	Met	Asp	Arg	Pro	Pro	Arg
865					870					875				Ser
Pro	Lys	Glu	Pro	Leu	Ile	Ser	Gly	Trp	Leu	Phe	Phe	Arg	Tyr	Met
				885					890					Ala
Ile	Gly	Gly	Tyr	Val	Gly	Ala	Ala	Thr	Val	Gly	Ala	Ala	Ala	Trp

```

          900          905          910
Phe Leu Tyr Ala Glu Asp Gly Pro His Val Asn Tyr Ser Gln Leu Thr
          915          920          925
His Phe Met Gln Cys Thr Glu Asp Asn Thr His Phe Glu Gly Ile Asp
          930          935          940
Cys Glu Val Phe Glu Ala Pro Glu Pro Met Thr Met Ala Leu Ser Val
945          950          955          960
Leu Val Thr Ile Glu Met Cys Asn Ala Leu Asn Ser Leu Ser Glu Asn
          965          970          975
Gln Ser Leu Leu Arg Met Pro Pro Trp Val Asn Ile Trp Leu Leu Gly
          980          985          990
Ser Ile Cys Leu Ser Met Ser Leu His Phe Leu Ile Leu Tyr Val Asp
          995          1000          1005
Pro Leu Pro Met Ile Phe Lys Leu Arg Ala Leu Asp Leu Thr Gln Trp
          1010          1015          1020
Leu Met Val Leu Lys Ile Ser Leu Pro Val Ile Gly Leu Asp Glu Ile
1025          1030          1035          1040
Leu Lys Phe Val Ala Arg Asn Tyr Leu Glu Gly Xaa Leu Phe Pro Leu
          1045          1050          1055
Leu His Leu Xaa Ala Arg Val Thr Asp Pro Glu Asp Glu Arg Arg Lys
          1060          1065          1070          1072

```

<210> 2968

<211> 804

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(803)

<223> Xaa = any amino acid or nothing

<400> 2968

```

          1          5          10          15
Gly Ala Arg Ser Cys Ser Arg Leu Gly Arg Cys Thr Phe Pro Leu Trp
          20          25          30
Lys Gly Arg Glu Met Glu Val Arg Lys Leu Ser Ile Ser Trp Gln Phe
          35          40          45
Leu Ile Val Leu Val Leu Ile Leu Gln Ile Leu Ser Ala Leu Asp Phe
          50          55          60
Asp Pro Tyr Arg Val Leu Gly Val Ser Arg Thr Ala Ser Gln Ala Asp
          65          70          75          80
Ile Lys Lys Ala Tyr Lys Lys Leu Ala Arg Glu Trp His Pro Asp Lys
          85          90          95
Asn Lys Asp Pro Gly Ala Glu Asp Lys Phe Ile Gln Ile Ser Lys Ala
          100          105          110
Tyr Glu Ile Leu Ser Asn Glu Glu Lys Arg Ser Asn Tyr Asp Gln Tyr
          115          120          125
Gly Asp Ala Gly Glu Asn Gln Gly Tyr Gln Lys Gln Gln Gln Arg
          130          135          140
Glu Tyr Arg Phe Arg His Phe His Glu Asn Phe Tyr Phe Asp Glu Ser
          145          150          155          160
Phe Phe His Phe Pro Phe Asn Ser Glu Arg Arg Asp Ser Ile Asp Glu
          165          170          175
Lys Tyr Leu Leu His Phe Ser His Tyr Val Asn Glu Val Ala Pro Asp
          180          185          190
Ser Phe Lys Lys Pro Tyr Leu Ile Lys Ile Thr Ser Asp Trp Cys Phe
          195          200          205
Ser Cys Ile His Ile Glu Pro Val Trp Lys Glu Val Ile Gln Glu Leu
          205
Glu Glu Leu Gly Val Gly Ile Gly Val Val His Ala Gly Tyr Glu Arg

```

210	215	220
Arg Leu Ala His His Leu Gly Ala His Ser Thr Pro Ser Ile Leu Gly		
225	230	235
Ile Ile Asn Gly Lys Ile Ser Phe Phe His Asn Ala Val Val Arg Glu		240
	245	250
Asn Leu Arg Gln Phe Val Glu Ser Leu Leu Pro Gly Asn Leu Val Glu		255
	260	265
Lys Val Thr Asn Lys Asn Tyr Val Arg Phe Leu Ser Gly Trp Gln Gln		270
	275	280
Glu Asn Lys Pro His Val Leu Leu Phe Asp Gln Thr Pro Ile Val Pro		285
	290	295
Leu Leu Tyr Lys Leu Thr Ala Phe Ala Tyr Lys Asp Tyr Leu Ser Phe		300
305	310	315
Gly Tyr Val Tyr Val Gly Leu Arg Gly Thr Glu Glu Met Thr Arg Arg		320
	325	330
Tyr Asn Ile Asn Ile Tyr Ala Pro Thr Leu Leu Val Phe Lys Glu His		335
	340	345
Ile Asn Arg Pro Ala Asp Val Ile Gln Ala Arg Gly Met Lys Lys Gln		350
	355	360
Ile Ile Asp Asp Phe Ile Thr Arg Asn Lys Tyr Leu Leu Ala Ala Arg		365
370	375	380
Leu Thr Ser Gln Lys Leu Phe His Glu Leu Cys Pro Val Lys Arg Ser		385
	390	395
His Arg Gln Arg Lys Tyr Cys Val Val Leu Leu Thr Ala Glu Thr Thr		400
	405	410
Lys Leu Ser Lys Pro Phe Glu Ala Phe Leu Ser Phe Ala Leu Ala Asn		415
	420	425
Thr Gln Asp Thr Val Arg Phe Val His Val Tyr Ser Asn Arg Gln Gln		430
	435	440
Glu Phe Ala Asp Thr Leu Leu Pro Asp Ser Glu Ala Phe Gln Gly Lys		445
	450	455
Ser Ala Val Ser Ile Leu Glu Arg Arg Asn Thr Ala Gly Arg Val Val		460
465	470	475
Tyr Lys Thr Leu Glu Asp Pro Trp Ile Gly Ser Glu Ser Asp Lys Phe		480
	485	490
Ile Leu Leu Gly Tyr Leu Asp Gln Leu Arg Lys Asp Pro Ala Leu Leu		495
	500	505
Ser Ser Glu Ala Val Leu Pro Asp Leu Thr Asp Glu Leu Ala Pro Val		510
	515	520
Phe Leu Leu Arg Trp Phe Tyr Ser Ala Ser Asp Tyr Ile Ser Asp Cys		525
	530	535
Trp Asp Ser Ile Phe His Asn Asn Trp Arg Glu Met Met Pro Leu Leu		540
545	550	555
Ser Leu Ile Phe Ser Ala Leu Phe Ile Leu Phe Gly Thr Val Ile Val		560
	565	570
Gln Ala Phe Ser Asp Ser Asn Asp Glu Arg Glu Ser Ser Pro Pro Glu		575
	580	585
Lys Glu Glu Ala Gln Glu Lys Thr Gly Lys Thr Glu Pro Ser Phe Thr		590
	595	600
Lys Glu Asn Ser Ser Lys Ile Pro Lys Lys Gly Phe Val Glu Val Thr		605
	610	615
Glu Leu Thr Asp Val Thr Tyr Thr Ser Asn Leu Val Arg Leu Arg Pro		620
625	630	635
Gly His Met Asn Val Val Leu Ile Leu Ser Asn Ser Thr Lys Thr Ser		640
	645	650
Leu Leu Gln Lys Phe Ala Leu Glu Val Tyr Thr Phe Thr Gly Ser Ser		655
	660	665
Cys Leu His Phe Ser Phe Leu Ser Leu Asp Lys His Arg Glu Trp Leu		670
	675	680
Glu Tyr Leu Leu Glu Phe Ala Gln Asp Ala Ala Pro Ile Pro Asn Gln		685
	690	695
Tyr Asp Lys His Phe Met Glu Arg Asp Tyr Thr Gly Tyr Val Leu Ala		700
705	710	715
Leu Asn Gly His Lys Lys Tyr Phe Cys Leu Phe Lys Pro Gln Lys Thr		720

				725					730					735			
Val	Glu	Glu	Gly	Gly	Lys	Pro	Xaa	Gly	Ser	Cys	Ser	Asp	Val	Asp	Ser		
			740					745					750				
Ser	Leu	Tyr	Leu	Gly	Glu	Ser	Arg	Gly	Lys	Pro	Ser	Cys	Gly	Leu	Gly		
		755					760					765					
Ser	Arg	Pro	Ile	Lys	Gly	Lys	Leu	Ser	Lys	Leu	Ser	Leu	Trp	Met	Glu		
	770					775					780						
Arg	Leu	Leu	Glu	Gly	Ser	Leu	Gln	Arg	Phe	Tyr	Ile	Pro	Ser	Trp	Pro		
785					790					795					800		
Glu	Leu	Asp															
		803															

<210> 2969

<211> 359

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(357)

<223> Xaa = any amino acid or nothing

<400> 2969

Lys	Gly	Leu	Ser	Pro	Asp	Gln	Val	Leu	Ser	Ala	Phe	Ala	Pro	Leu	Asp		
1				5				10					15				
Cys	Glu	Met	Trp	Leu	Lys	Val	Phe	Thr	Thr	Phe	Leu	Ser	Phe	Ala	Thr		
			20					25					30				
Gly	Ala	Cys	Ser	Gly	Leu	Lys	Val	Thr	Val	Pro	Ser	His	Thr	Val	His		
		35				40						45					
Gly	Val	Arg	Gly	Gln	Ala	Leu	Tyr	Leu	Pro	Val	His	Tyr	Gly	Phe	His		
	50					55					60						
Thr	Pro	Ala	Ser	Asp	Ile	Gln	Ile	Ile	Trp	Leu	Phe	Glu	Arg	Pro	His		
65					70					75				80			
Thr	Met	Pro	Lys	Tyr	Leu	Leu	Gly	Ser	Val	Asn	Lys	Ser	Val	Val	Pro		
			85					90					95				
Asp	Tyr	Gly	Ile	Pro	Tyr	Thr	Ser	Ser	Pro	Xaa	Cys	His	Pro	Met	Ala		
		100						105					110				
Ser	Leu	Leu	Ile	Asn	Pro	Leu	Gln	Phe	Pro	Asp	Glu	Gly	Asn	Tyr	Ile		
	115					120					125						
Val	Lys	Val	Asn	Ile	Gln	Gly	Asn	Gly	Thr	Leu	Ser	Ala	Ser	Gln	Lys		
	130					135					140						
Ile	Gln	Val	Thr	Val	Asp	Asp	Pro	Val	Thr	Lys	Pro	Val	Val	Gln	Ile		
145					150					155				160			
His	Pro	Pro	Ser	Gly	Ala	Val	Glu	Tyr	Val	Gly	Asn	Met	Thr	Leu	Thr		
			165					170					175				
Cys	His	Val	Glu	Gly	Gly	Thr	Arg	Leu	Ala	Tyr	Gln	Trp	Leu	Lys	Asn		
		180						185					190				
Gly	Arg	Pro	Val	His	Thr	Ser	Ser	Thr	Tyr	Ser	Phe	Ser	Pro	Gln	Asn		
	195					200						205					
Asn	Thr	Leu	His	Ile	Ala	Pro	Val	Thr	Lys	Glu	Asp	Ile	Gly	Asn	Tyr		
	210					215					220						
Ser	Cys	Leu	Val	Arg	Asn	Pro	Val	Ser	Glu	Met	Glu	Ser	Asp	Ile	Ile		
225					230					235				240			
Met	Pro	Ile	Ile	Tyr	Tyr	Gly	Pro	Tyr	Gly	Leu	Gln	Val	Asn	Ser	Asp		
			245					250					255				
Lys	Gly	Leu	Lys	Val	Gly	Glu	Val	Phe	Thr	Val	Asp	Leu	Gly	Glu	Ala		
		260						265					270				
Ile	Leu	Phe	Asp	Cys	Ser	Ala	Asp	Ser	His	Pro	Pro	Asn	Thr	Tyr	Ser		
	275					280						285					
Trp	Ile	Arg	Arg	Thr	Asp	Asn	Thr	Thr	Tyr	Ile	Ile	Lys	His	Gly	Pro		
	290					295					300						
Arg	Leu	Glu	Val	Ala	Ser	Glu	Lys	Val	Ala	Gln	Lys	Thr	Met	Asp	Tyr		

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305          310          315          320
Val Cys Cys Ala Tyr Asn Asn Ile Thr Gly Arg Gln Asp Glu Thr His
          325          330          335
Phe Thr Val Ile Ile Thr Ser Val Gly Met Cys Asp Ile Gln Gly Arg
          340          345          350
Asp Pro Asn Lys Thr
          355          357

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<210> 2970

<211> 291

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(289)

<223> Xaa = any amino acid or nothing

<400> 2970

```

His Ser Ala Leu Leu Thr His Ser Ser Phe Cys Val Phe Thr Leu Cys
 1          5          10          15
Gln Asp Phe Phe Thr Tyr Ser Ser Met Ser Glu Glu Val Thr Tyr Ala
          20          25          30
Asp Leu Gln Phe Gln Asn Ser Ser Glu Met Glu Lys Ile Pro Glu Ile
          35          40          45
Gly Lys Phe Gly Glu Lys Ala Pro Pro Ala Pro Ser His Val Trp Arg
          50          55          60
Pro Ala Ala Leu Phe Leu Thr Leu Leu Cys Leu Leu Leu Ile Gly
          65          70          75          80
Leu Gly Val Leu Ala Ser Met Phe His Val Thr Leu Lys Ile Glu Met
          85          90          95
Lys Lys Met Asn Lys Leu Gln Asn Ile Ser Glu Glu Leu Gln Arg Asn
          100          105          110
Ile Ser Leu Gln Leu Met Ser Asn Met Asn Ile Ser Asn Lys Ile Arg
          115          120          125
Asn Leu Ser Thr Thr Leu Gln Thr Ile Ala Thr Lys Leu Cys Arg Glu
          130          135          140
Leu Tyr Ser Lys Glu Gln Glu His Lys Cys Lys Pro Cys Pro Arg Arg
          145          150          155          160
Trp Ile Trp His Lys Asp Ser Cys Tyr Phe Leu Ser Asp Asp Val Gln
          165          170          175
Thr Trp Gln Glu Ser Lys Met Ala Cys Ala Ala Gln Asn Ala Ser Leu
          180          185          190
Leu Lys Ile Asn Asn Lys Asn Ala Leu Glu Phe Ile Lys Ser Gln Ser
          195          200          205
Arg Ser Tyr Asp Tyr Trp Leu Gly Leu Ser Pro Glu Glu Asp Ser Tyr
          210          215          220
Ser Trp Tyr Glu Ser Gly Xaa Tyr Asn Gln Pro Ser Ala Trp Val Ile
          225          230          235          240
Arg Asn Ala Pro Asp Leu Asn Asn Met Tyr Cys Gly Tyr Ile Asn Arg
          245          250          255
Leu Tyr Val Gln Tyr Tyr His Cys Thr Tyr Lys Gln Arg Met Ile Cys
          260          265          270
Glu Lys Met Ala Asn Pro Val Gln Leu Gly Ser Thr Tyr Phe Arg Glu
          275          280          285
Ala
289

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<210> 2971

<211> 460

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(458)

<223> Xaa = any amino acid or nothing

<400> 2971

```

Val Pro Asn Tyr Leu Pro Ser Val Ser Ser Ala Ile Gly Gly Glu Val
 1          5          10          15
Pro Gln Arg Tyr Val Trp Arg Phe Cys Ile Gly Leu His Ser Ala Pro
          20          25          30
Arg Phe Leu Val Ala Phe Ala Tyr Trp Asn His Tyr Leu Ser Cys Thr
          35          40          45
Ser Pro Cys Ser Cys Tyr Arg Pro Leu Cys Arg Leu Asn Phe Gly Leu
 50          55          60
Asn Val Val Glu Asn Leu Ala Leu Leu Val Leu Thr Tyr Val Ser Ser
 65          70          75          80
Ser Glu Asp Phe Thr Trp Val Pro Gly Xaa Gly Arg Ser Gly Glu Val
          85          90          95
Phe Pro Glu Gly Thr Gly Leu Pro Leu Pro His Ser Asp Leu Pro Thr
          100          105          110
Ser Trp Cys Gly His Ser Leu Gln Cys Gly Ser Gln Ser Ser Phe Pro
          115          120          125
Pro Ala Ile His Glu Asn Ala Phe Ile Val Phe Ile Ala Ser Ser Leu
 130          135          140
Gly His Met Leu Leu Thr Cys Ile Leu Trp Arg Leu Thr Lys Lys His
 145          150          155          160
Thr Val Ser Gln Glu Asp Gly Leu Ser Leu Ala Gly Ala Pro Arg Gln
          165          170          175
Pro Arg Arg Lys Ser Arg Thr Ser Val Leu Arg Ile Arg Val Met Val
          180          185          190
Arg Trp Glu Leu Ser Ser Asn Gly Asn Pro Gly Arg Gly Val Leu Gly
          195          200          205
Leu Gly Leu Gly Leu Gly Asn Lys Leu Arg Val Val Gly Gln Asn Leu
 210          215          220
Gly Leu Xaa His Cys Val Trp Val Val Trp Glu Thr Gly Glu Xaa Lys
 225          230          235          240
Arg Trp Arg Leu Gln Met Gly Ile Glu Xaa Gly Val Ala Ser Arg Arg
          245          250          255
Gln Xaa Val Arg Asn Ser Val Arg Gly Leu Val Cys His Asn Ser Ser
          260          265          270
Ala Pro Pro Met Tyr Met Gly Phe Phe Ser Pro Thr Val Phe Gly Gly
          275          280          285
Gly Val Gly Gly Xaa Leu His Val Thr Phe Ile Leu His Pro Pro Glu
          290          295          300
Val Glu Ala Ala Gly Ile Pro Leu Leu Leu Gly Pro Ser Leu Pro Gln
 305          310          315          320
Arg Gln Gly Arg Glu His Ile Val Val Ile Leu Ala Ala Pro Ala Cys
          325          330          335
Ala Pro Phe His Asp Arg Xaa Trp Glu Pro Arg Glu Ile Arg Pro Ser
          340          345          350
Pro Xaa Glu Leu Gly Leu Arg Gly Glu Pro Thr Leu Ser Tyr Pro Ala
          355          360          365
Ser Cys Arg Val Ile Arg Gln Pro Ile Pro Xaa Asp Arg Lys Ser Tyr
 370          375          380
Ser Trp Lys Gln Arg Leu Phe Ile Ile Asn Phe Ile Ser Phe Phe Ser
 385          390          395          400
Ala Leu Ala Val Tyr Phe Arg His Asn Met Tyr Cys Glu Ala Gly Val
          405          410          415
Tyr Thr Ile Phe Ala Ile Leu Glu Tyr Thr Val Val Leu Thr Asn Met
          420          425          430
Ala Phe His Met Thr Ala Trp Trp Asp Phe Gly Asn Lys Glu Leu Leu

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435 440 445
 Ile Thr Ser Gln Pro Glu Glu Lys Arg Phe
 450 455 458

<210> 2972
 <211> 498
 <212> PRT
 <213> Homo sapiens

<400> 2972
 Gly Gly Ile Leu Ser Gly Arg Asp Gly Arg Thr Ala Leu Pro Arg Pro
 1 5 10 15
 Arg Glu Pro Ala Glu Arg Thr Ala Gly Leu Arg Arg Asp Met Arg Pro
 20 25 30
 Gln Glu Leu Pro Arg Leu Ala Phe Pro Leu Leu Leu Leu Leu Leu
 35 40 45
 Leu Leu Pro Pro Pro Cys Pro Ala His Ser Ala Thr Arg Phe Asp
 50 55 60
 Pro Thr Trp Glu Ser Leu Asp Ala Arg Gln Leu Pro Ala Trp Phe Asp
 65 70 75 80
 Gln Ala Lys Phe Gly Ile Phe Ile His Trp Gly Val Phe Ser Val Pro
 85 90 95
 Ser Phe Gly Ser Glu Trp Phe Trp Trp Tyr Trp Gln Lys Glu Lys Ile
 100 105 110
 Pro Lys Tyr Val Glu Phe Met Lys Asp Asn Tyr Pro Pro Ser Phe Lys
 115 120 125
 Tyr Glu Asp Phe Gly Pro Leu Phe Thr Ala Lys Phe Phe Asn Ala Asn
 130 135 140
 Gln Trp Ala Asp Ile Phe Gln Ala Ser Gly Ala Lys Tyr Ile Val Leu
 145 150 155 160
 Thr Ser Lys His His Glu Gly Phe Thr Leu Trp Gly Ser Glu Tyr Ser
 165 170 175
 Trp Asn Trp Asn Ala Ile Asp Glu Gly Pro Lys Arg Asp Ile Val Lys
 180 185 190
 Glu Leu Glu Val Ala Ile Arg Asn Arg Thr Asp Leu Arg Phe Gly Leu
 195 200 205
 Tyr Tyr Ser Leu Phe Glu Trp Phe His Pro Leu Phe Leu Glu Asp Glu
 210 215 220
 Ser Ser Ser Phe His Lys Arg Gln Phe Pro Val Ser Lys Thr Leu Pro
 225 230 235 240
 Glu Leu Tyr Glu Leu Val Asn Asn Tyr Gln Pro Glu Val Leu Trp Ser
 245 250 255
 Asp Gly Asp Gly Gly Ala Pro Asp Gln Tyr Trp Asn Ser Thr Gly Phe
 260 265 270
 Leu Ala Trp Leu Tyr Asn Glu Ser Pro Val Arg Gly Thr Val Val Thr
 275 280 285
 Asn Asp Arg Trp Gly Ala Gly Ser Ile Cys Lys His Gly Gly Phe Tyr
 290 295 300
 Thr Cys Ser Asp Arg Tyr Asn Pro Gly His Leu Leu Pro His Lys Trp
 305 310 315 320
 Glu Asn Cys Met Thr Ile Asp Lys Leu Ser Trp Gly Tyr Arg Arg Glu
 325 330 335
 Ala Gly Ile Ser Asp Tyr Leu Thr Ile Glu Glu Leu Val Lys Gln Leu
 340 345 350
 Val Glu Thr Val Ser Cys Gly Gly Asn Leu Leu Met Asn Ile Gly Pro
 355 360 365
 Thr Leu Asp Gly Thr Ile Ser Val Val Phe Glu Glu Arg Leu Arg Gln
 370 375 380
 Met Gly Ser Trp Leu Lys Val Asn Gly Glu Ala Ile Tyr Glu Thr His
 385 390 395 400
 Thr Trp Arg Ser Gln Asn Asp Thr Val Thr Pro Asp Val Trp Tyr Thr

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<210> 2973
<211> 370
<212> PRT
<213> Homo sapiens
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4636

```
<210> 2974
<211> 528
<212> PRT
<213> Homo sapiens
```

4637

370	375	380
Glu Lys Asn Val Pro	Asn Thr Ala Leu Thr	Ala Leu Glu Asn Ala Ser
385	390	395
Ile Leu Thr Ser Ser	Leu Thr Ala Glu Asp	Asp Arg Gly Gly Ser Val
405	410	415
Ile Lys Tyr Ser Lys	Asn Thr Thr Arg Lys	Gln Trp Leu Lys Glu Thr
420	425	430
Pro Asp Thr Leu Leu	Asn Ile Leu Lys Asn Ala	Asp Leu Ser Leu Ala
435	440	445
Phe Gln Thr Tyr Thr	Ile Tyr Arg Pro Gly	Ser Glu Gly Phe Leu Lys
450	455	460
Gly Pro Leu Ser Glu	Glu Thr Glu Ala Ser	Asp Ser Val Asp Gly Gly
465	470	475
His Asp Ser Val Ile	Leu Asp Pro Glu Arg	Leu Glu Pro Gly Leu Asp
485	490	495
Glu Glu Asp Thr Asp	Phe Glu Glu Glu Asp	Asn Pro Asp Trp Val
500	505	510
Ser Glu Leu Lys Lys	Arg Ala Gly Trp Gln	Gly Leu Cys Asp Arg
515	520	525
		527

<210> 2975
 <211> 939
 <212> PRT
 <213> Homo sapiens

<400> 2975

Pro Pro Gly Glu Pro	Gly Ala Gly Arg Gly	Ala Leu Ser Pro Cys Gly
1	5	10
Pro Leu Ser Gly Pro	Pro Pro Leu Pro	Gly Arg Glu Ala Gly Gly Thr
20	25	30
Cys Gly Gln Pro Val	Asn Pro Val Phe Asp	Leu Ser Arg Arg Asn Pro
35	40	45
Gln Glu Asp Phe Glu	Leu Ile Gln Arg Ile	Gly Ser Gly Thr Tyr Gly
50	55	60
Asp Val Tyr Lys Ala	Arg Asn Val Asn Thr	Gly Glu Leu Ala Ala Ile
65	70	75
Lys Val Ile Lys Leu	Glu Pro Gly Glu Asp	Phe Ala Val Val Gln Gln
85	90	95
Glu Ile Ile Met Met	Lys Asp Cys Lys His	Pro Asp Ile Val Ala Tyr
100	105	110
Phe Gly Ser Tyr Leu	Arg Arg Asp Lys Leu	Trp Ile Cys Met Glu Phe
115	120	125
Cys Gly Ser Gly Ser	Leu Gln Asp Ile Tyr	His Val Thr Gly Pro Leu
130	135	140
Ser Glu Leu Gln Ile	Ala Tyr Val Ser Arg	Glu Thr Leu Gln Gly Leu
145	150	155
Tyr Tyr Leu His Ser	Lys Gly Lys Met His	Arg Asp Ile Lys Gly Ala
165	170	175
Asn Ile Leu Leu Thr	Asp Asn Gly His Val	Lys Leu Ala Asp Phe Gly
180	185	190
Val Ser Ala Gln Ile	Thr Ala Thr Ile Ala	Lys Arg Lys Ser Phe Ile
195	200	205
Gly Thr Pro Tyr Trp	Met Ala Pro Glu Val	Ala Ala Val Glu Arg Lys
210	215	220
Gly Gly Tyr Asn Gln	Leu Cys Asp Leu Trp	Ala Val Gly Ile Thr Ala
225	230	235
Ile Glu Leu Ala Glu	Leu Gln Pro Pro Met	Phe Asp Leu His Pro Met
245	250	255
Arg Ala Leu Phe Leu	Met Thr Lys Ser Asn	Phe Gln Pro Pro Lys Leu
260	265	270
Lys Asp Lys Met Lys	Trp Ser Asn Ser Phe	His His Phe Val Lys Met

275	280	285
Ala Leu Thr Lys Asn Pro	Lys Lys Arg Pro Thr	Ala Glu Lys Leu Leu
290	295	300
Gln His Pro Phe Val Thr	Gln His Leu Thr Arg	Ser Leu Ala Ile Glu
305	310	315
Leu Leu Asp Lys Val Asn Asn	Pro Asp His Ser Thr	Tyr His Asp Phe
325	330	335
Asp Asp Asp Asp Pro Glu Pro	Leu Val Ala Val Pro	His Arg Ile His
340	345	350
Ser Thr Ser Arg Asn Val Arg	Glu Glu Lys Thr Arg	Ser Glu Ile Thr
355	360	365
Phe Gly Gln Val Lys Phe Asp	Pro Pro Leu Arg Lys	Glu Thr Glu Pro
370	375	380
His His Glu Leu Pro Asp Ser	Asp Gly Phe Leu Asp	Ser Ser Glu Glu
385	390	395
Ile Tyr Tyr Thr Ala Arg Ser	Asn Leu Asp Leu Gln	Leu Glu Tyr Gly
405	410	415
Gln Gly His Gln Gly Gly Tyr	Phe Leu Gly Ala Asn	Lys Ser Leu Leu
420	425	430
Lys Ser Val Glu Glu Glu Leu	His Gln Arg Gly His	Val Ala His Leu
435	440	445
Glu Asp Asp Glu Gly Asp Asp	Asp Glu Ser Lys His	Ser Thr Leu Lys
450	455	460
Ala Lys Ile Pro Pro Pro Leu	Pro Pro Lys Pro Lys	Ser Ile Phe Ile
465	470	475
Pro Gln Glu Met His Ser Thr	Glu Asp Glu Asn Gln	Gly Thr Ile Lys
485	490	495
Arg Cys Pro Met Ser Gly Ser	Pro Ala Lys Pro Ser	Gln Val Pro Pro
500	505	510
Arg Pro Pro Pro Pro Arg Leu	Pro Pro His Lys Pro	Val Ala Leu Gly
515	520	525
Asn Gly Met Ser Ser Phe Gln	Leu Asn Gly Glu Arg	Asp Gly Ser Leu
530	535	540
Cys Gln Gln Gln Asn Glu His	Arg Gly Glu Asn Leu	Ser Arg Lys Glu
545	550	555
Lys Lys Asp Val Pro Lys Pro	Ile Ser Asn Gly Leu	Pro Pro Thr Pro
565	570	575
Lys Val His Met Gly Ala Cys	Phe Ser Lys Val Phe	Asn Gly Cys Pro
580	585	590
Leu Lys Ile His Cys Ala Ser	Ser Trp Ile Asn Pro	Asp Thr Arg Asp
595	600	605
Gln Tyr Leu Ile Phe Gly Ala	Glu Glu Gly Ile Tyr	Thr Leu Asn Leu
610	615	620
Asn Glu Leu His Glu Thr Ser	Met Glu Gln Leu Phe	Pro Arg Arg Cys
625	630	635
Thr Trp Leu Tyr Val Met Asn	Asn Cys Leu Leu Ser	Ile Ser Gly Lys
645	650	655
Ala Ser Gln Leu Tyr Ser His	Asn Leu Pro Gly Leu	Phe Asp Tyr Ala
660	665	670
Arg Gln Met Gln Lys Leu Pro	Val Ala Ile Pro Ala	His Lys Leu Pro
675	680	685
Asp Arg Ile Leu Pro Arg Lys	Phe Ser Val Ser Ala	Lys Ile Pro Glu
690	695	700
Thr Lys Trp Cys Gln Lys Cys	Cys Val Val Arg Asn	Pro Tyr Thr Gly
705	710	715
His Lys Tyr Leu Cys Gly Ala	Leu Gln Thr Ser Ile	Val Leu Leu Glu
725	730	735
Trp Val Glu Pro Met Gln Lys	Phe Met Leu Ile Lys	His Ile Asp Phe
740	745	750
Pro Ile Pro Cys Pro Leu Lys	Met Phe Glu Met Leu	Val Val Pro Glu
755	760	765
Gln Glu Tyr Pro Leu Val Cys	Val Gly Val Ser Arg	Gly Arg Asp Phe
770	775	780
Asn Gln Val Val Arg Phe Glu	Thr Val Asn Pro Asn	Ser Thr Ser Ser

```

785              790              795              800
Trp Phe Thr Glu Ser Asp Thr Pro Gln Thr Asn Val Thr His Val Thr
      805              810              815
Gln Leu Glu Arg Asp Thr Ile Leu Val Cys Leu Asp Cys Cys Ile Lys
      820              825              830
Ile Val Asn Leu Gln Gly Arg Leu Lys Ser Ser Arg Lys Leu Ser Ser
      835              840              845
Glu Leu Thr Phe Asp Phe Arg Ile Glu Ser Ile Val Cys Leu Gln Asp
      850              855              860
Ser Val Leu Ala Phe Trp Lys His Gly Met Gln Gly Arg Ser Phe Arg
      865              870              875              880
Ser Asn Glu Val Thr Gln Glu Ile Ser Asp Ser Thr Arg Ile Phe Arg
      885              890              895
Leu Leu Gly Ser Asp Arg Val Val Val Leu Glu Ser Arg Pro Thr Asp
      900              905              910
Asn Pro Thr Ala Asn Ser Asn Leu Tyr Ile Leu Ala Gly His Glu Asn
      915              920              925
Ser Tyr
      930

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<210> 2976
<211> 939
<212> PRT
<213> Homo sapiens

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<400> 2976
Pro Pro Gly Glu Pro Gly Ala Gly Arg Gly Ala Leu Ser Pro Cys Gly
  1              5              10              15
Pro Leu Ser Gly Pro Pro Pro Leu Pro Gly Arg Glu Ala Gly Gly Thr
      20              25              30
Cys Gly Gln Pro Val Asn Pro Val Phe Asp Leu Ser Arg Arg Asn Pro
      35              40              45
Gln Glu Asp Phe Glu Leu Ile Gln Arg Ile Gly Ser Gly Thr Tyr Gly
      50              55              60
Asp Val Tyr Lys Ala Arg Asn Val Asn Thr Gly Glu Leu Ala Ala Ile
      65              70              75              80
Lys Val Ile Lys Leu Glu Pro Gly Glu Asp Phe Ala Val Val Gln Gln
      85              90              95
Glu Ile Ile Met Met Lys Asp Cys Lys His Pro Asp Ile Val Ala Tyr
      100              105              110
Phe Gly Ser Tyr Leu Arg Arg Asp Lys Leu Trp Ile Cys Met Glu Phe
      115              120              125
Cys Gly Ser Gly Ser Leu Gln Asp Ile Tyr His Val Thr Gly Pro Leu
      130              135              140
Ser Glu Leu Gln Ile Ala Tyr Val Ser Arg Glu Thr Leu Gln Gly Leu
      145              150              155              160
Tyr Tyr Leu His Ser Lys Gly Lys Met His Arg Asp Ile Lys Gly Ala
      165              170              175
Asn Ile Leu Leu Thr Asp Asn Gly His Val Lys Leu Ala Asp Phe Gly
      180              185              190
Val Ser Ala Gln Ile Thr Ala Thr Ile Ala Lys Arg Lys Ser Phe Ile
      195              200              205
Gly Thr Pro Tyr Trp Met Ala Pro Glu Val Ala Ala Val Glu Arg Lys
      210              215              220
Gly Gly Tyr Asn Gln Leu Cys Asp Leu Trp Ala Val Gly Ile Thr Ala
      225              230              235              240
Ile Glu Leu Ala Glu Leu Gln Pro Pro Met Phe Asp Leu His Pro Met
      245              250              255
Arg Ala Leu Phe Leu Met Thr Lys Ser Asn Phe Gln Pro Pro Lys Leu
      260              265              270
Lys Asp Lys Met Lys Trp Ser Asn Ser Phe His His Phe Val Lys Met

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275	280	285
Ala Leu Thr Lys Asn Pro Lys Lys Arg Pro Thr	Ala Glu Lys Leu Leu	
290	295	300
Gln His Pro Phe Val Thr Gln His Leu Thr Arg Ser Leu Ala Ile Glu		
305	310	315
Leu Leu Asp Lys Val Asn Asn Pro Asp His Ser Thr Tyr His Asp Phe		320
	325	330
Asp Asp Asp Asp Pro Glu Pro Leu Val Ala Val Pro His Arg Ile His		335
	340	345
Ser Thr Ser Arg Asn Val Arg Glu Glu Lys Thr Arg Ser Glu Ile Thr		350
	355	360
Phe Gly Gln Val Lys Phe Asp Pro Pro Leu Arg Lys Glu Thr Glu Pro		365
	370	375
His His Glu Leu Pro Asp Ser Asp Gly Phe Leu Asp Ser Ser Glu Glu		380
385	390	395
Ile Tyr Tyr Thr Ala Arg Ser Asn Leu Asp Leu Gln Leu Glu Tyr Gly		400
	405	410
Gln Gly His Gln Gly Gly Tyr Phe Leu Gly Ala Asn Lys Ser Leu Leu		415
	420	425
Lys Ser Val Glu Glu Glu Leu His Gln Arg Gly His Val Ala His Leu		430
	435	440
Glu Asp Asp Glu Gly Asp Asp Glu Ser Lys His Ser Thr Leu Lys		445
	450	455
Ala Lys Ile Pro Pro Pro Leu Pro Pro Lys Pro Lys Ser Ile Phe Ile		460
	465	470
Pro Gln Glu Met His Ser Thr Glu Asp Glu Asn Gln Gly Thr Ile Lys		475
	485	490
Arg Cys Pro Met Ser Gly Ser Pro Ala Lys Pro Ser Gln Val Pro Pro		495
	500	505
Arg Pro Pro Pro Pro Arg Leu Pro Pro His Lys Pro Val Ala Leu Gly		510
	515	520
Asn Gly Met Ser Ser Phe Gln Leu Asn Gly Glu Arg Asp Gly Ser Leu		525
	530	535
Cys Gln Gln Gln Asn Glu His Arg Gly Glu Asn Leu Ser Arg Lys Glu		540
	545	550
Lys Lys Asp Val Pro Lys Pro Ile Ser Asn Gly Leu Pro Pro Thr Pro		555
	565	570
Lys Val His Met Gly Ala Cys Phe Ser Lys Val Phe Asn Gly Cys Pro		575
	580	585
Leu Lys Ile His Cys Ala Ser Ser Trp Ile Asn Pro Asp Thr Arg Asp		590
	595	600
Gln Tyr Leu Ile Phe Gly Ala Glu Glu Gly Ile Tyr Thr Leu Asn Leu		605
	610	615
Asn Glu Leu His Glu Thr Ser Met Glu Gln Leu Phe Pro Arg Arg Cys		620
	625	630
Thr Trp Leu Tyr Val Met Asn Asn Cys Leu Leu Ser Ile Ser Gly Lys		635
	645	650
Ala Ser Gln Leu Tyr Ser His Asn Leu Pro Gly Leu Phe Asp Tyr Ala		655
	660	665
Arg Gln Met Gln Lys Leu Pro Val Ala Ile Pro Ala His Lys Leu Pro		670
	675	680
Asp Arg Ile Leu Pro Arg Lys Phe Ser Val Ser Ala Lys Ile Pro Glu		685
	690	695
Thr Lys Trp Cys Gln Lys Cys Cys Val Val Arg Asn Pro Tyr Thr Gly		700
	705	710
His Lys Tyr Leu Cys Gly Ala Leu Gln Thr Ser Ile Val Leu Leu Glu		715
	725	730
Trp Val Glu Pro Met Gln Lys Phe Met Leu Ile Lys His Ile Asp Phe		735
	740	745
Pro Ile Pro Cys Pro Leu Lys Met Phe Glu Met Leu Val Val Pro Glu		750
	755	760
Gln Glu Tyr Pro Leu Val Cys Val Gly Val Ser Arg Gly Arg Asp Phe		765
	770	775
Asn Gln Val Val Arg Phe Glu Thr Val Asn Pro Asn Ser Thr Ser Ser		780

785 790 795 800
 Trp Phe Thr Glu Ser Asp Thr Pro Gln Thr Asn Val Thr His Val Thr
 805 810 815
 Gln Leu Glu Arg Asp Thr Ile Leu Val Cys Leu Asp Cys Cys Ile Lys
 820 825 830
 Ile Val Asn Leu Gln Gly Arg Leu Lys Ser Ser Arg Lys Leu Ser Ser
 835 840 845
 Glu Leu Thr Phe Asp Phe Arg Ile Glu Ser Ile Val Cys Leu Gln Asp
 850 855 860
 Ser Val Leu Ala Phe Trp Lys His Gly Met Gln Gly Arg Ser Phe Arg
 865 870 875 880
 Ser Asn Glu Val Thr Gln Glu Ile Ser Asp Ser Thr Arg Ile Phe Arg
 885 890 895
 Leu Leu Gly Ser Asp Arg Val Val Val Leu Glu Ser Arg Pro Thr Asp
 900 905 910
 Asn Pro Thr Ala Asn Ser Asn Leu Tyr Ile Leu Ala Gly His Glu Asn
 915 920 925
 Ser Tyr
 930

<210> 2977

<211> 457

<212> PRT

<213> Homo sapiens

<400> 2977

Tyr Ser Leu Arg Lys Gly Ile Thr Phe Lys Leu Ala Gly Ala Met Val
 1 5 10 15
 His Ile Lys Lys Gly Glu Leu Thr Gln Glu Glu Lys Glu Leu Leu Glu
 20 25 30
 Val Ile Gly Lys Gly Thr Val Gln Glu Ala Gly Thr Leu Leu Ser Ser
 35 40 45
 Lys Asn Val Arg Val Asn Cys Leu Asp Glu Asn Gly Met Thr Pro Leu
 50 55 60
 Met His Ala Ala Tyr Lys Gly Lys Leu Asp Met Cys Lys Leu Leu Leu
 65 70 75 80
 Arg His Gly Ala Asp Val Asn Cys His Gln His Glu His Gly Tyr Thr
 85 90 95
 Ala Leu Met Phe Ala Ala Leu Ser Gly Asn Lys Asp Ile Thr Trp Val
 100 105 110
 Met Leu Glu Ala Gly Ala Glu Thr Asp Val Val Asn Ser Val Gly Arg
 115 120 125
 Thr Ala Ala Gln Met Ala Ala Phe Val Gly Gln His Asp Cys Val Thr
 130 135 140
 Ile Ile Asn Asn Phe Phe Pro Arg Glu Arg Leu Asp Tyr Tyr Thr Lys
 145 150 155 160
 Pro Gln Gly Leu Asp Lys Glu Pro Lys Leu Pro Pro Lys Leu Ala Gly
 165 170 175
 Pro Leu His Lys Ile Ile Thr Thr Thr Asn Leu His Pro Val Lys Ile
 180 185 190
 Val Met Leu Val Asn Glu Asn Pro Leu Leu Thr Glu Glu Ala Ala Leu
 195 200 205
 Asn Lys Cys Tyr Arg Val Met Asp Leu Ile Cys Glu Lys Cys Met Lys
 210 215 220
 Gln Arg Asp Met Asn Glu Val Leu Ala Met Lys Met His Tyr Ile Ser
 225 230 235 240
 Cys Ile Phe Gln Lys Cys Ile Asn Phe Leu Lys Asp Gly Glu Asn Lys
 245 250 255
 Leu Asp Thr Leu Ile Lys Ser Leu Leu Lys Gly Arg Ala Ser Asp Gly
 260 265 270
 Phe Pro Val Tyr Pro Glu Lys Ile Leu Arg Glu Ser Ile Arg Lys Phe

275	280	285
Pro Tyr Cys Glu Ala Thr	Leu Leu Gln Gln Leu Val	Arg Ser Ile Ala
290	295	300
Pro Val Glu Ile Gly Ser	Asp Pro Thr Ala Phe	Ser Val Leu Thr Gln
305	310	315
Ala Ile Thr Gly Gln Val	Gly Phe Val Asp Val	Glu Phe Cys Thr Thr
325	330	335
Cys Gly Glu Lys Gly Ala	Ser Lys Arg Cys Ser	Val Cys Lys Met Val
340	345	350
Ile Tyr Cys Asp Gln Thr	Cys Gln Lys Thr His	Trp Phe Thr His Lys
355	360	365
Lys Ile Cys Lys Asn Leu	Lys Asp Ile Tyr Glu	Lys Gln Gln Leu Glu
370	375	380
Ala Ala Lys Glu Lys Arg	Gln Glu Glu Asn His	Gly Lys Leu Asp Val
385	390	395
Asn Ser Asn Cys Val Asn	Glu Glu Gln Pro Glu	Ala Glu Val Gly Ile
405	410	415
Ser Gln Lys Asp Ser Asn	Pro Glu Asp Ser Gly	Glu Gly Lys Lys Glu
420	425	430
Ser Leu Glu Ser Glu Ala	Glu Leu Glu Gly Leu	Gln Asp Ala Pro Ala
435	440	445
Gly Pro Gln Val Ser Glu	Glu	
450	455	

<210> 2978

<211> 1726

<212> PRT

<213> Homo sapiens

<400> 2978

Ser Asp Asp Leu Arg Thr	Gly Leu Phe Gln Asp	Val Gln Asp Ala Glu
1	5	10
Ser Leu Lys Leu Pro Gly	Val Tyr Glu Val Leu	Phe Tyr Asn Glu Thr
20	25	30
Glu Asp Cys Pro Gly Met	Met Leu Trp Arg Tyr	Pro Glu Pro Arg Gly
35	40	45
Leu Thr Leu Val Arg Ile	Thr Pro Val Pro Phe	Asn Thr Thr Glu Asp
50	55	60
Pro Asp Ile Ser Thr Ala	Asp Leu Gly Asp Val	Leu Gln Asp Pro Cys
65	70	75
Ser Leu Glu Tyr Trp Asp	Glu Leu Gln Lys Val	Phe Val Ala Phe Arg
85	90	95
Glu Phe Asn Leu Ser Glu	Ser Lys Val Cys Glu	Leu Gln Leu Pro Asp
100	105	110
Ile Asn Leu Val Asn Asp	Gln Lys Leu Val Ser	Ser Asp Leu Trp
115	120	125
Arg Ile Val Leu Asn Ser	Ser Gln Asn Gly Ala	Asp Asp Gln Ser Ser
130	135	140
Ala Ser Glu Ser Gly Ser	Gln Ser Thr Cys Asp	Pro Leu Val Thr Pro
145	150	155
Thr Ala Leu Ala Ala Cys	Thr Arg Val Asp Ser	Cys Phe Thr Pro Trp
165	170	175
Phe Val Pro Ser Leu Cys	Val Ser Phe Gln Phe	Ala His Leu Glu Phe
180	185	190
His Leu Cys His His Leu	Asp Gln Leu Gly Thr	Ala Ala Pro Gln Tyr
195	200	205
Leu Gln Pro Phe Val Ser	Asp Arg Asn Met Pro	Ser Glu Leu Glu Tyr
210	215	220
Met Ile Val Ser Phe Arg	Glu Pro His Met Tyr	Leu Arg Gln Trp Asn
225	230	235
Asn Gly Ser Val Cys Gln	Glu Ile Gln Phe Leu	Ala Gln Ala Asp Cys

4644

755					760					765					
Asp	Glu	Glu	Ala	Phe	Val	Asp	Thr	Glu	Ile	Arg	Leu	Gly	Ala	Phe	Pro
770						775					780				
Gly	His	Gln	Lys	Leu	Cys	Gln	Phe	Cys	Ile	Ser	Ser	Met	Val	Gln	Gln
785						790					795				800
Gly	Ile	Gln	Ile	Ile	Gln	Ile	Glu	Asp	Lys	Thr	Thr	Ile	Ile	Asn	Asn
				805					810					815	
Thr	Pro	Tyr	Gln	Ile	Phe	Tyr	Lys	Pro	Gln	Leu	Ser	Val	Cys	Asn	Pro
			820						825					830	
His	Ser	Gly	Lys	Glu	Tyr	Phe	Arg	Val	Pro	Asp	Ser	Ala	Thr	Phe	Ser
			835						840					845	
Ile	Cys	Pro	Gly	Gly	Glu	Gln	Pro	Ala	Met	Lys	Ser	Ser	Ser	Leu	Pro
			850						855					860	
Cys	Trp	Asp	Leu	Met	Pro	Asp	Ile	Ser	Gln	Ser	Val	Leu	Asp	Ala	Ser
865									870					875	880
Leu	Leu	Gln	Lys	Gln	Ile	Met	Leu	Gly	Phe	Ser	Pro	Ala	Pro	Gly	Ala
				885					890					895	
Asp	Ser	Ser	Gln	Cys	Trp	Ser	Leu	Pro	Ala	Ile	Val	Arg	Pro	Glu	Phe
			900						905					910	
Pro	Arg	Gln	Ser	Val	Ala	Val	Pro	Leu	Gly	Asn	Phe	Arg	Glu	Asn	Gly
			915						920					925	
Phe	Cys	Thr	Arg	Ala	Ile	Val	Leu	Thr	Tyr	Gln	Glu	His	Leu	Gly	Val
			930						935					940	
Thr	Tyr	Leu	Thr	Leu	Ser	Glu	Asp	Pro	Ser	Pro	Arg	Val	Ile	Ile	His
945									950					955	960
Asn	Arg	Cys	Pro	Val	Lys	Met	Leu	Ile	Lys	Glu	Asn	Ile	Lys	Asp	Ile
				965					970					975	
Pro	Lys	Phe	Glu	Val	Tyr	Cys	Lys	Lys	Ile	Pro	Ser	Glu	Cys	Ser	Ile
			980						985					990	
His	His	Glu	Leu	Tyr	His	Gln	Ile	Ser	Ser	Tyr	Pro	Asp	Cys	Lys	Thr
			995						1000					1005	
Lys	Asp	Leu	Leu	Pro	Ser	Leu	Leu	Leu	Arg	Val	Glu	Pro	Leu	Asp	Glu
			1010						1015					1020	
Val	Thr	Thr	Glu	Trp	Ser	Asp	Ala	Ile	Asp	Ile	Asn	Ser	Gln	Gly	Thr
1025									1030					1035	1040
Gln	Val	Val	Phe	Leu	Thr	Gly	Phe	Gly	Tyr	Val	Tyr	Val	Asp	Val	Val
			1045						1050					1055	
His	Gln	Cys	Gly	Thr	Val	Phe	Ile	Thr	Val	Ala	Pro	Glu	Gly	Lys	Ala
			1060						1065					1070	
Gly	Pro	Ile	Leu	Thr	Asn	Thr	Asn	Arg	Ala	Pro	Glu	Lys	Ile	Val	Thr
			1075						1080					1085	
Phe	Lys	Met	Phe	Ile	Thr	Gln	Leu	Ser	Leu	Ala	Val	Phe	Asp	Asp	Leu
			1090						1095					1100	
Thr	His	His	Lys	Ala	Ser	Ala	Glu	Leu	Leu	Arg	Leu	Thr	Leu	Asp	Asn
1105									1110					1115	1120
Ile	Phe	Leu	Cys	Val	Ala	Pro	Gly	Ala	Gly	Pro	Leu	Pro	Gly	Glu	Glu
			1125						1130					1135	
Pro	Val	Ala	Ala	Leu	Phe	Glu	Leu	Tyr	Cys	Val	Glu	Ile	Cys	Cys	Gly
			1140						1145					1150	
Asp	Leu	Gln	Leu	Asp	Asn	Gln	Leu	Tyr	Asn	Lys	Ser	Asn	Phe	His	Phe
			1155						1160					1165	
Ala	Val	Leu	Val	Cys	Gln	Gly	Glu	Lys	Ala	Glu	Pro	Ile	Gln	Cys	Ser
			1170						1175					1180	
Lys	Met	Gln	Ser	Leu	Leu	Ile	Ser	Asn	Lys	Glu	Leu	Glu	Glu	Tyr	Lys
1185									1190					1195	1200
Glu	Lys	Cys	Phe	Ile	Lys	Leu	Cys	Ile	Thr	Leu	Asn	Glu	Gly	Lys	Ser
			1205						1210					1215	
Ile	Leu	Cys	Asp	Ile	Asn	Glu	Phe	Ser	Phe	Glu	Leu	Lys	Pro	Ala	Arg
			1220						1225					1230	
Leu	Tyr	Val	Glu	Asp	Thr	Phe	Val	Tyr	Tyr	Ile	Lys	Thr	Leu	Phe	Asp
			1235						1240					1245	
Thr	Tyr	Leu	Pro	Asn	Ser	Arg	Leu	Ala	Gly	His	Ser	Thr	His	Leu	Ser
			1250						1255					1260	
Gly	Gly	Lys	Gln	Val	Leu	Pro	Met	Gln	Val	Thr	Gln	His	Ala	Arg	Ala

1265	1270	1275	1280
Leu Val Asn Pro Val Lys Leu Arg Lys Leu Val Ile Gln Pro Val Asn			
	1285	1290	1295
Leu Leu Val Ser Ile His Ala Ser Leu Lys Leu Tyr Ile Ala Ser Asp			
	1300	1305	1310
His Thr Pro Leu Ser Phe Ser Val Phe Glu Arg Gly Pro Ile Phe Thr			
	1315	1320	1325
Thr Ala Arg Gln Leu Val His Ala Leu Ala Met His Tyr Ala Ala Gly			
	1330	1335	1340
Ala Leu Phe Arg Ala Gly Trp Val Val Gly Ser Leu Asp Ile Leu Gly			
1345	1350	1355	1360
Ser Pro Ala Ser Leu Val Arg Ser Ile Gly Asn Gly Val Ala Asp Phe			
	1365	1370	1375
Phe Arg Leu Pro Tyr Glu Gly Leu Thr Arg Gly Pro Gly Ala Phe Val			
	1380	1385	1390
Ser Gly Val Ser Arg Gly Thr Thr Ser Phe Val Lys His Ile Ser Lys			
	1395	1400	1405
Gly Thr Leu Thr Ser Ile Thr Asn Leu Ala Thr Ser Leu Ala Arg Asn			
	1410	1415	1420
Met Asp Arg Leu Ser Leu Asp Glu Glu His Tyr Asn Arg Gln Glu Glu			
1425	1430	1435	1440
Trp Arg Arg Gln Leu Pro Glu Ser Leu Gly Glu Gly Leu Arg Gln Gly			
	1445	1450	1455
Leu Ser Arg Leu Gly Ile Ser Leu Leu Gly Ala Ile Ala Gly Ile Val			
	1460	1465	1470
Asp Gln Pro Met Gln Asn Phe Gln Lys Thr Ser Glu Ala Gln Ala Ser			
	1475	1480	1485
Ala Gly His Lys Ala Lys Gly Val Ile Ser Gly Val Gly Lys Gly Ile			
	1490	1495	1500
Met Gly Val Phe Thr Lys Pro Ile Gly Gly Ala Ala Glu Leu Val Ser			
1505	1510	1515	1520
Gln Thr Gly Tyr Gly Ile Leu His Gly Ala Gly Leu Ser Gln Leu Pro			
	1525	1530	1535
Lys Gln Arg His Gln Pro Ser Asp Val His Ala Asp Gln Ala Pro Asn			
	1540	1545	1550
Ser His Val Lys Tyr Val Trp Lys Met Leu Gln Ser Leu Gly Arg Pro			
	1555	1560	1565
Glu Val His Met Ala Leu Asp Val Val Leu Val Arg Gly Ser Gly Gln			
	1570	1575	1580
Glu His Glu Gly Cys Leu Leu Leu Thr Ser Glu Val Leu Phe Val Val			
1585	1590	1595	1600
Ser Val Ser Glu Asp Thr Gln Gln Gln Ala Phe Pro Val Thr Glu Ile			
	1605	1610	1615
Asp Cys Ala Gln Asp Ser Lys Gln Asn Asn Leu Leu Thr Val Gln Leu			
	1620	1625	1630
Lys Gln Pro Arg Val Ala Cys Asp Val Glu Val Asp Gly Val Arg Glu			
	1635	1640	1645
Arg Leu Ser Glu Gln Gln Tyr Asn Arg Leu Val Asp Tyr Ile Thr Lys			
	1650	1655	1660
Thr Ser Cys His Leu Ala Pro Ser Cys Ser Ser Met Gln Ile Pro Cys			
1665	1670	1675	1680
Pro Val Val Ala Ala Glu Pro Pro Pro Ser Thr Val Lys Thr Tyr His			
	1685	1690	1695
Tyr Leu Val Asp Pro His Phe Ala Gln Val Phe Leu Ser Lys Phe Thr			
	1700	1705	1710
Met Val Lys Asn Lys Ala Leu Arg Lys Gly Phe Pro			
	1715	1720	1724

<210> 2979
 <211> 811
 <212> PRT
 <213> Homo sapiens

<400> 2979

Ala Trp Leu Phe Pro Ala Ser Val Leu Cys Pro Arg Cys Leu Thr Gly
 1 5 10 15
 Ser Ala Val Gly Ser Ala Glu Trp Lys Ser Leu Val Val Leu Phe Pro
 20 25 30
 Phe Ser Ser Arg Pro Thr Leu Gly His Leu Asp Ser Lys Pro Ser Ser
 35 40 45
 Lys Ser Asn Met Ile Arg Gly Arg Asn Ser Ala Thr Ser Ala Asp Glu
 50 55 60
 Gln Pro His Ile Gly Asn Tyr Arg Leu Leu Lys Thr Ile Gly Lys Gly
 65 70 75 80
 Asn Phe Ala Lys Val Lys Leu Ala Arg His Ile Leu Thr Gly Lys Glu
 85 90 95
 Val Ala Val Lys Ile Ile Asp Lys Thr Gln Leu Asn Ser Ser Ser Leu
 100 105 110
 Gln Lys Leu Phe Arg Glu Val Arg Ile Met Lys Val Leu Asn His Pro
 115 120 125
 Asn Ile Val Lys Leu Phe Glu Val Ile Glu Thr Glu Lys Thr Leu Tyr
 130 135 140
 Leu Val Met Glu Tyr Ala Ser Gly Gly Glu Val Phe Asp Tyr Leu Val
 145 150 155 160
 Ala His Gly Arg Met Lys Glu Lys Glu Ala Arg Ala Lys Phe Arg Gln
 165 170 175
 Ile Val Ser Ala Val Gln Tyr Cys His Gln Lys Phe Ile Val His Arg
 180 185 190
 Asp Leu Lys Ala Glu Asn Leu Leu Asp Ala Asp Met Asn Ile Lys
 195 200 205
 Ile Ala Asp Phe Gly Phe Ser Asn Glu Phe Thr Phe Gly Asn Lys Leu
 210 215 220
 Asp Thr Phe Cys Gly Ser Pro Pro Tyr Ala Ala Pro Glu Leu Phe Gln
 225 230 235 240
 Gly Lys Lys Tyr Asp Gly Pro Glu Val Asp Val Trp Ser Leu Gly Val
 245 250 255
 Ile Leu Tyr Thr Leu Val Ser Gly Ser Leu Pro Phe Asp Gly Gln Asn
 260 265 270
 Leu Lys Glu Leu Arg Glu Arg Val Leu Arg Gly Lys Tyr Arg Ile Pro
 275 280 285
 Phe Tyr Met Ser Thr Asp Cys Glu Asn Leu Leu Lys Lys Phe Leu Ile
 290 295 300
 Leu Asn Pro Ser Lys Arg Gly Thr Leu Glu Gln Ile Met Lys Asp Arg
 305 310 315 320
 Trp Met Asn Val Gly His Glu Asp Asp Glu Leu Lys Pro Tyr Gly Glu
 325 330 335
 Pro Leu Pro Asp Tyr Lys Asp Pro Arg Arg Thr Glu Leu Met Val Ser
 340 345 350
 Met Gly Tyr Thr Arg Glu Glu Ile Gln Asp Ser Leu Val Gly Gln Arg
 355 360 365
 Tyr Asn Glu Val Met Ala Thr Tyr Leu Leu Leu Gly Tyr Lys Ser Ser
 370 375 380
 Glu Leu Glu Gly Asp Thr Ile Thr Leu Lys Pro Arg Pro Ser Ala Asp
 385 390 395 400
 Leu Thr Asn Ser Ser Ala Pro Ser Pro Ser His Lys Val Gln Arg Ser
 405 410 415
 Val Ser Ala Asn Pro Lys Gln Arg Arg Phe Ser Asp Gln Ala Gly Pro
 420 425 430
 Ala Ile Pro Thr Ser Asn Ser Tyr Ser Lys Lys Thr Gln Ser Asn Asn
 435 440 445
 Ala Glu Asn Lys Arg Pro Glu Glu Asp Arg Glu Ser Gly Arg Lys Ala
 450 455 460
 Ser Ser Thr Ala Lys Val Pro Ala Ser Pro Leu Pro Gly Leu Glu Arg
 465 470 475 480
 Lys Lys Thr Thr Pro Thr Pro Ser Thr Asn Ser Val Leu Ser Thr Ser

				485						490					495				
Thr	Asn	Arg	Ser	Arg	Asn	Ser	Pro	Leu	Leu	Glu	Arg	Ala	Ser	Leu	Gly				
			500						505					510					
Gln	Gly	Phe	His	Pro	Glu	Trp	Ala	Lys	Thr	Ala	Leu	Thr	Met	Pro	Gly				
		515					520						525						
Ser	Arg	Ala	Ser	Thr	Ala	Ser	Ala	Ser	Ala	Ala	Val	Ser	Ala	Ala	Arg				
		530					535					540							
Pro	Arg	Gln	His	Gln	Lys	Ser	Met	Ser	Ala	Ser	Val	His	Pro	Asn	Lys				
		545				550				555					560				
Ala	Ser	Gly	Leu	Pro	Pro	Thr	Glu	Ser	Asn	Cys	Glu	Val	Pro	Arg	Pro				
				565					570					575					
Arg	Gln	Val	Cys	Trp	Gly	Ser	Cys	Thr	Ala	Pro	Gln	Arg	Val	Pro	Val				
			580						585				590						
Ala	Ser	Pro	Ser	Ala	His	Asn	Ile	Ser	Ser	Ser	Gly	Gly	Ala	Pro	Asp				
		595					600					605							
Arg	Thr	Asn	Phe	Pro	Arg	Gly	Val	Ser	Ser	Arg	Ser	Thr	Phe	His	Ala				
		610				615						620							
Gly	Gln	Leu	Arg	Gln	Val	Arg	Asp	Gln	Gln	Asn	Leu	Pro	Tyr	Gly	Val				
		625				630				635				640					
Thr	Pro	Ala	Ser	Pro	Ser	Gly	His	Ser	Gln	Gly	Arg	Arg	Gly	Ala	Ser				
				645					650				655						
Gly	Ser	Ile	Phe	Ser	Lys	Phe	Thr	Ser	Lys	Phe	Val	Arg	Arg	Asn	Leu				
			660					665					670						
Asn	Glu	Pro	Glu	Ser	Lys	Asp	Arg	Val	Glu	Thr	Leu	Arg	Pro	His	Val				
		675					680					685							
Val	Asn	Ser	Gly	Gly	Asn	Asp	Lys	Glu	Lys	Glu	Glu	Phe	Arg	Glu	Ala				
		690				695					700								
Lys	Pro	Arg	Ser	Leu	Arg	Phe	Thr	Trp	Ser	Met	Lys	Thr	Thr	Ser	Ser				
		705				710				715				720					
Met	Glu	Pro	Asn	Glu	Met	Met	Arg	Glu	Ile	Arg	Lys	Val	Leu	Asp	Ala				
				725					730					735					
Asn	Ser	Cys	Gln	Ser	Glu	Leu	His	Glu	Lys	Tyr	Met	Leu	Leu	Cys	Met				
			740					745					750						
His	Gly	Thr	Pro	Gly	His	Glu	Asp	Phe	Val	Gln	Trp	Glu	Met	Glu	Val				
		755					760						765						
Cys	Lys	Leu	Pro	Arg	Leu	Ser	Leu	Asn	Gly	Val	Arg	Phe	Lys	Arg	Ile				
		770				775					780								
Ser	Gly	Thr	Ser	Met	Ala	Phe	Lys	Asn	Ile	Ala	Ser	Lys	Ile	Ala	Asn				
		785				790				795					800				
Glu	Leu	Lys	Leu																
			804																

<210> 2980

<211> 1107

<212> PRT

<213> Homo sapiens

<400> 2980

Asn	Cys	Leu	Leu	Leu	Gln	Ala	Lys	Gly	Phe	His	Gly	Glu	Ile	Glu	Asp				
1				5					10					15					
Leu	Gln	Gln	Trp	Leu	Thr	Asp	Thr	Glu	Arg	His	Leu	Leu	Ala	Ser	Lys				
		20						25					30						
Pro	Leu	Gly	Leu	Pro	Glu	Thr	Ala	Lys	Glu	Gln	Leu	Asn	Val	His					
		35				40					45								
Met	Glu	Val	Cys	Ala	Ala	Phe	Glu	Ala	Lys	Glu	Glu	Thr	Tyr	Lys	Ser				
		50				55					60								
Leu	Met	Gln	Lys	Gly	Gln	Gln	Met	Leu	Ala	Arg	Cys	Pro	Lys	Ser	Ala				
		65				70				75				80					
Glu	Thr	Asn	Ile	Asp	Gln	Asp	Ile	Asn	Asn	Leu	Lys	Glu	Lys	Trp	Glu				
			85					90					95						
Ser	Val	Glu	Thr	Lys	Leu	Asn	Glu	Arg	Lys	Thr	Lys	Leu	Glu	Glu	Ala				

4649

610	615	620
Ser Leu Gln Ser His Ile Pro Val Leu Asp Lys Gly Arg Ala Gly Arg		
625	630	635
Lys Arg Phe Pro Ala Ser Ser Leu Tyr Pro Ser Gly Ser Gln Thr Gln		640
	645	650
Ile Glu Thr Lys Asn Pro Arg Val Asn Leu Leu Val Ser Lys Trp Gln		655
	660	665
Gln Val Trp Leu Leu Ala Leu Glu Arg Arg Arg Lys Leu Asn Asp Ala		670
	675	680
Leu Asp Arg Leu Glu Glu Leu Arg Glu Phe Ala Asn Phe Asp Phe Asp		685
	690	695
Ile Trp Arg Lys Lys Tyr Met Arg Trp Met Asn His Lys Lys Ser Arg		700
705	710	715
Val Met Asp Phe Phe Arg Arg Ile Asp Lys Asp Gln Asp Gly Lys Ile		720
	725	730
Thr Arg Gln Glu Phe Ile Asp Gly Ile Leu Ser Ser Lys Phe Pro Thr		735
	740	745
Ser Arg Leu Glu Met Ser Ala Val Ala Asp Ile Phe Asp Arg Asp Gly		750
	755	760
Asp Gly Tyr Ile Asp Tyr Tyr Glu Phe Val Ala Ala Leu His Pro Asn		765
770	775	780
Lys Asp Ala Tyr Lys Pro Ile Thr Asp Ala Asp Lys Ile Glu Asp Glu		785
	790	795
Val Thr Arg Gln Val Ala Lys Cys Lys Cys Ala Lys Arg Phe Gln Val		800
	805	810
Glu Gln Ile Gly Asp Asn Lys Tyr Arg Phe Phe Leu Gly Asn Gln Phe		815
	820	825
Gly Asp Ser Gln Gln Leu Arg Leu Val Arg Ile Leu Arg Ser Thr Val		830
	835	840
Met Val Arg Val Gly Gly Gly Trp Met Ala Leu Asp Glu Phe Leu Val		845
	850	855
Lys Asn Asp Pro Cys Arg Ala Lys Gly Arg Thr Asn Met Glu Leu Arg		860
865	870	875
Glu Lys Phe Ile Leu Ala Asp Gly Ala Ser Gln Gly Met Ala Ala Phe		880
	885	890
Arg Pro Arg Gly Arg Arg Ser Arg Pro Ser Ser Arg Gly Ala Ser Pro		895
	900	905
Asn Arg Ser Thr Ser Val Ser Ser Gln Ala Ala Gln Ala Ala Ser Pro		910
	915	920
Gln Val Pro Ala Thr Thr Thr Pro Lys Ile Leu His Pro Leu Thr Arg		925
	930	935
Asn Tyr Gly Lys Pro Trp Leu Thr Asn Ser Lys Met Ser Thr Pro Cys		940
945	950	955
Lys Ala Ala Glu Cys Ser Asp Phe Pro Val Pro Ser Ala Glu Gly Thr		960
	965	970
Pro Ile Gln Gly Ser Lys Leu Arg Leu Pro Gly Tyr Leu Ser Gly Lys		975
	980	985
Gly Phe His Ser Gly Glu Asp Ser Gly Leu Ile Thr Thr Ala Ala Ala		990
	995	1000
Arg Val Arg Thr Gln Phe Ala Asp Ser Lys Lys Thr Pro Ser Arg Pro		1005
	1010	1015
Gly Ser Arg Ala Gly Ser Lys Ala Gly Ser Arg Ala Ser Ser Arg Arg		1020
1025	1030	1035
Gly Ser Asp Ala Ser Asp Phe Asp Ile Ser Glu Ile Gln Ser Val Cys		1040
	1045	1050
Ser Asp Val Glu Thr Val Pro Gln Thr His Arg Pro Thr Pro Arg Ala		1055
	1060	1065
Gly Ser Arg Pro Ser Thr Ala Lys Pro Ser Lys Ile Pro Thr Pro Gln		1070
	1075	1080
Arg Lys Ser Pro Ala Ser Lys Leu Asp Lys Ser Ser Lys Arg		1085
	1090	1095
		1100
		1102

<210> 2981
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 <212> PRT
 <213> Homo sapiens

<400> 2981
 Asn Cys Leu Leu Leu Gln Ala Lys Gly Phe His Gly Glu Ile Glu Asp
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 Leu Gln Gln Trp Leu Thr Asp Thr Glu Arg His Leu Leu Ala Ser Lys
 20 25 30
 Pro Leu Gly Gly Leu Pro Glu Thr Ala Lys Glu Gln Leu Asn Val His
 35 40 45
 Met Glu Val Cys Ala Ala Phe Glu Ala Lys Glu Glu Thr Tyr Lys Ser
 50 55 60
 Leu Met Gln Lys Gly Gln Gln Met Leu Ala Arg Cys Pro Lys Ser Ala
 65 70 75 80
 Glu Thr Asn Ile Asp Gln Asp Ile Asn Asn Leu Lys Glu Lys Trp Glu
 85 90 95
 Ser Val Glu Thr Lys Leu Asn Glu Arg Lys Thr Lys Leu Glu Glu Ala
 100 105 110
 Leu Asn Leu Ala Met Glu Phe His Asn Ser Leu Gln Asp Phe Ile Asn
 115 120 125
 Trp Leu Thr Gln Ala Glu Gln Thr Leu Asn Val Ala Ser Arg Pro Ser
 130 135 140
 Leu Ile Leu Asp Thr Val Leu Phe Gln Ile Asp Glu His Lys Val Phe
 145 150 155 160
 Ala Asn Glu Val Asn Ser His Arg Glu Gln Ile Ile Glu Leu Asp Lys
 165 170 175
 Thr Gly Thr His Leu Lys Tyr Phe Ser Gln Lys Gln Asp Val Val Leu
 180 185 190
 Ile Lys Asn Leu Leu Ile Ser Val Gln Ser Arg Trp Glu Lys Val Val
 195 200 205
 Gln Arg Leu Val Glu Arg Gly Arg Ser Leu Asp Asp Ala Arg Lys Arg
 210 215 220
 Ala Lys Gln Phe His Glu Ala Trp Ser Lys Leu Met Glu Trp Leu Glu
 225 230 235 240
 Glu Ser Glu Lys Ser Leu Asp Ser Glu Leu Glu Ile Ala Asn Asp Pro
 245 250 255
 Asp Lys Ile Lys Thr Gln Leu Ala Gln His Lys Glu Phe Gln Lys Ser
 260 265 270
 Leu Gly Ala Lys His Ser Val Tyr Asp Thr Thr Asn Arg Thr Gly Arg
 275 280 285
 Ser Leu Lys Glu Lys Thr Ser Leu Ala Asp Asp Asn Leu Lys Leu Asp
 290 295 300
 Asp Met Leu Ser Glu Leu Arg Asp Lys Trp Asp Thr Ile Cys Gly Lys
 305 310 315 320
 Ser Val Glu Arg Gln Asn Lys Leu Glu Glu Ala Leu Leu Phe Ser Gly
 325 330 335
 Gln Phe Thr Asp Ala Leu Gln Ala Leu Ile Asp Trp Leu Tyr Arg Val
 340 345 350
 Glu Pro Gln Leu Ala Glu Asp Gln Pro Val His Gly Asp Ile Asp Leu
 355 360 365
 Val Met Asn Leu Ile Asp Asn His Lys Ala Phe Gln Lys Glu Leu Gly
 370 375 380
 Lys Arg Thr Ser Ser Val Gln Ala Leu Lys Arg Ser Ala Arg Glu Leu
 385 390 395 400
 Ile Glu Gly Ser Arg Asp Asp Ser Ser Trp Val Lys Val Gln Met Gln
 405 410 415
 Glu Leu Ser Thr Arg Trp Glu Thr Val Cys Ala Leu Ser Ile Ser Lys
 420 425 430
 Gln Thr Arg Leu Glu Ala Ala Leu Arg Gln Ala Glu Glu Phe His Ser
 435 440 445
 Val Val His Ala Leu Leu Glu Trp Leu Ala Glu Ala Glu Gln Thr Leu

450	455	460
Arg Phe His Gly Val	Leu Pro Asp Asp Glu Asp	Ala Leu Arg Thr Leu
465	470	475
Ile Asp Gln His Lys	Glu Phe Met Lys Lys	Leu Glu Glu Lys Arg Ala
485	490	495
Glu Leu Asn Lys Ala	Thr Thr Met Gly Asp Thr	Val Leu Ala Ile Cys
500	505	510
His Pro Asp Ser Ile	Thr Thr Ile Lys His Trp	Ile Thr Ile Ile Arg
515	520	525
Ala Arg Phe Glu Glu	Val Leu Ala Trp Ala Lys	Gln His Gln Gln Arg
530	535	540
Leu Ala Ser Ala Leu	Ala Gly Leu Ile Ala Lys	Gln Glu Leu Leu Glu
545	550	555
Ala Leu Leu Ala Trp	Leu Gln Trp Ala Glu Thr	Thr Leu Thr Asp Lys
565	570	575
Asp Lys Glu Val Ile	Pro Gln Glu Ile Glu	Glu Val Lys Ala Leu Ile
580	585	590
Ala Glu His Gln Thr	Phe Met Glu Glu Met Thr	Arg Lys Gln Pro Asp
595	600	605
Val Asp Lys Val Thr	Lys Thr Tyr Lys Arg Arg	Ala Ala Asp Pro Ser
610	615	620
Ser Leu Gln Ser His	Ile Pro Val Leu Asp Lys	Gly Arg Ala Gly Arg
625	630	635
Lys Arg Phe Pro Ala	Ser Ser Leu Tyr Pro Ser	Gly Ser Gln Thr Gln
645	650	655
Ile Glu Thr Lys Asn	Pro Arg Val Asn Leu Leu	Val Ser Lys Trp Gln
660	665	670
Gln Val Trp Leu Leu	Ala Leu Glu Arg Arg Arg	Lys Leu Asn Asp Ala
675	680	685
Leu Asp Arg Leu Glu	Glu Glu Leu Arg Glu Phe	Ala Asn Phe Asp Phe Asp
690	695	700
Ile Trp Arg Lys Lys	Tyr Met Arg Trp Met Asn	His Lys Lys Ser Arg
705	710	715
Val Met Asp Phe Phe	Arg Arg Ile Asp Lys Asp	Gln Asp Gly Lys Ile
725	730	735
Thr Arg Gln Glu Phe	Ile Asp Gly Ile Leu Ser	Ser Lys Phe Pro Thr
740	745	750
Ser Arg Leu Glu Met	Ser Ala Val Ala Asp Ile	Phe Asp Arg Asp Gly
755	760	765
Asp Gly Tyr Ile Asp	Tyr Tyr Glu Phe Val Ala	Ala Leu His Pro Asn
770	775	780
Lys Asp Ala Tyr Lys	Pro Ile Thr Asp Ala Asp	Lys Ile Glu Asp Glu
785	790	795
Val Thr Arg Gln Val	Ala Lys Cys Lys Cys Ala	Lys Arg Phe Gln Val
805	810	815
Glu Gln Ile Gly Asp	Asn Lys Tyr Arg Phe Phe	Leu Gly Asn Gln Phe
820	825	830
Gly Asp Ser Gln Gln	Leu Arg Leu Val Arg Ile	Leu Arg Ser Thr Val
835	840	845
Met Val Arg Val Gly	Gly Gly Trp Met Ala Leu	Asp Glu Phe Leu Val
850	855	860
Lys Asn Asp Pro Cys	Arg Ala Lys Gly Arg Thr	Asn Met Glu Leu Arg
865	870	875
Glu Lys Phe Ile Leu	Ala Asp Gly Ala Ser Gln	Gly Met Ala Ala Phe
885	890	895
Arg Pro Arg Gly Arg	Arg Ser Arg Pro Ser Ser	Arg Gly Ala Ser Pro
900	905	910
Asn Arg Ser Thr Ser	Val Ser Ser Gln Ala Ala	Gln Ala Ala Ser Pro
915	920	925
Gln Val Pro Ala Thr	Thr Thr Pro Lys Ile Leu	His Pro Leu Thr Arg
930	935	940
Asn Tyr Gly Lys Pro	Trp Leu Thr Asn Ser Lys	Met Ser Thr Pro Cys
945	950	955
Lys Ala Ala Glu Cys	Ser Asp Phe Pro Val Pro	Ser Ala Glu Gly Thr

965 970 975
 Pro Ile Gln Gly Ser Lys Leu Arg Leu Pro Gly Tyr Leu Ser Gly Lys
 980 985 990
 Gly Phe His Ser Gly Glu Asp Ser Gly Leu Ile Thr Thr Ala Ala Ala
 995 1000 1005
 Arg Val Arg Thr Gln Phe Ala Asp Ser Lys Lys Thr Pro Ser Arg Pro
 1010 1015 1020
 Gly Ser Arg Ala Gly Ser Lys Ala Gly Ser Arg Ala Ser Ser Arg Arg
 1025 1030 1035 1040
 Gly Ser Asp Ala Ser Asp Phe Asp Ile Ser Glu Ile Gln Ser Val Cys
 1045 1050 1055
 Ser Asp Val Glu Thr Val Pro Gln Thr His Arg Pro Thr Pro Arg Ala
 1060 1065 1070
 Gly Ser Arg Pro Ser Thr Ala Lys Pro Ser Lys Ile Pro Thr Pro Gln
 1075 1080 1085
 Arg Lys Ser Pro Ala Ser Lys Leu Asp Lys Ser Ser Lys Arg
 1090 1095 1100 1102

<210> 2982
 <211> 688
 <212> PRT
 <213> Homo sapiens

<400> 2982
 Met Ala Ala Gly Gly Ala Glu Gly Gly Ser Gly Pro Gly Ala Ala Met
 1 5 10 15
 Gly Asp Cys Ala Glu Ile Lys Ser Gln Phe Arg Thr Arg Glu Gly Phe
 20 25 30
 Tyr Lys Leu Leu Pro Gly Asp Gly Ala Ala Arg Arg Ser Gly Pro Ala
 35 40 45
 Ser Ala Gln Thr Pro Val Pro Pro Gln Pro Pro Gln Pro Pro Gly
 50 55 60
 Pro Ala Ser Ala Ser Gly Pro Gly Ala Ala Gly Pro Ala Ser Ser Pro
 65 70 75 80
 Pro Pro Ala Gly Pro Gly Pro Gly Pro Ala Leu Pro Ala Val Arg Leu
 85 90 95
 Ser Leu Val Arg Leu Gly Glu Pro Asp Ser Ala Gly Ala Gly Glu Pro
 100 105 110
 Pro Ala Thr Pro Ala Gly Leu Gly Ser Gly Gly Asp Arg Val Cys Phe
 115 120 125
 Asn Leu Gly Arg Glu Leu Tyr Phe Tyr Pro Gly Cys Cys Arg Arg Gly
 130 135 140
 Ser Gln Arg Trp His Thr Pro Leu Thr Pro Phe Leu Pro Pro Leu Lys
 145 150 155 160
 Ser Ile Asp Leu Asn Lys Pro Ile Asp Lys Arg Ile Tyr Lys Gly Thr
 165 170 175
 Gln Pro Thr Cys His Asp Phe Asn Gln Phe Thr Ala Ala Thr Glu Thr
 180 185 190
 Ile Ser Leu Leu Val Gly Phe Ser Ala Gly Gln Val Gln Tyr Leu Asp
 195 200 205
 Leu Ile Lys Lys Asp Thr Ser Lys Leu Phe Asn Glu Glu Arg Leu Ile
 210 215 220
 Asp Lys Thr Lys Val Thr Tyr Leu Lys Trp Leu Pro Glu Ser Glu Ser
 225 230 235 240
 Leu Phe Leu Ala Ser His Ala Ser Gly His Leu Tyr Leu Tyr Asn Val
 245 250 255
 Ser His Pro Cys Ala Ser Ala Pro Pro Gln Tyr Ser Leu Leu Lys Gln
 260 265 270
 Ala Trp Gly Phe Ser Phe Tyr Ala Ala Lys Ser Lys Ala Pro Arg Asn
 275 280 285
 Pro Leu Ala Lys Trp Ala Val Gly Glu Gly Pro Leu Asn Glu Phe Ala

290	295	300
Phe Ser Pro Asp Gly Arg His Leu Ala Cys Val Ser Gln Asp Gly Cys		
305	310	315
Leu Arg Val Phe His Phe Asp Ser Met Leu Leu Arg Gly Leu Met Lys		320
	325	330
Ser Tyr Phe Gly Gly Leu Leu Cys Val Cys Trp Ser Pro Asp Gly Arg		335
	340	345
Tyr Val Val Thr Gly Gly Glu Asp Asp Leu Val Thr Val Trp Ser Phe		350
	355	360
Thr Glu Gly Arg Val Val Ala Arg Gly His Gly His Lys Ser Trp Val		365
	370	375
Asn Ala Val Ala Phe Asp Pro Tyr Thr Thr Arg Ala Glu Glu Ala Ala		380
385	390	395
Thr Ala Ala Gly Ala Asp Gly Glu Arg Ser Gly Glu Glu Glu Glu Glu		400
	405	410
Glu Pro Glu Ala Ala Gly Thr Gly Ser Ala Gly Gly Ala Pro Leu Ser		415
	420	425
Pro Leu Pro Lys Ala Gly Ser Ile Thr Tyr Arg Phe Gly Ser Ala Gly		430
	435	440
Gln Asp Thr Gln Phe Cys Leu Trp Asp Leu Thr Glu Asp Val Leu Tyr		445
	450	455
Pro His Pro Pro Leu Ala Arg Thr Arg Thr Leu Pro Gly Thr Pro Gly		460
465	470	475
Thr Thr Pro Pro Ala Ala Ser Ser Ser Arg Gly Gly Glu Pro Gly Pro		480
	485	490
Gly Pro Leu Pro Arg Ser Leu Ser Arg Ser Asn Ser Leu Pro His Pro		495
	500	505
Ala Gly Gly Gly Lys Ala Gly Gly Pro Gly Val Ala Ala Glu Pro Gly		510
	515	520
Thr Pro Phe Ser Ile Gly Arg Phe Ala Thr Leu Thr Leu Gln Glu Arg		525
	530	535
Arg Asp Arg Gly Ala Glu Lys Glu His Lys Arg Tyr His Ser Leu Gly		540
545	550	555
Asn Ile Ser Arg Gly Gly Ser Gly Gly Ser Gly Ser Gly Gly Glu Lys		560
	565	570
Pro Ser Gly Pro Val Pro Arg Ser Arg Leu Asp Pro Ala Lys Val Leu		575
	580	585
Gly Thr Ala Leu Cys Pro Arg Ile His Glu Val Pro Leu Leu Glu Pro		590
	595	600
Leu Val Cys Lys Lys Ile Ala Gln Glu Arg Leu Thr Val Leu Leu Phe		605
	610	615
Leu Glu Asp Cys Ile Ile Thr Ala Cys Gln Glu Gly Leu Ile Cys Thr		620
625	630	635
Trp Ala Arg Pro Gly Lys Ala Phe Thr Asp Glu Glu Thr Glu Ala Gln		640
	645	650
Thr Gly Glu Gly Ser Trp Pro Arg Ser Pro Ser Lys Ser Val Val Glu		655
	660	665
Gly Ile Ser Ser Gln Pro Gly Asn Ser Pro Ser Gly Thr Val Val		670
	675	680
		685
		687

<210> 2983

<211> 1211

<212> PRT

<213> Homo sapiens

<400> 2983

Arg Arg Phe Arg Leu Ser Ala His Arg Ala Gln Pro Cys Cys Arg Cys		
1	5	10
Arg Gly Leu Glu Met Pro Arg Gly Val Phe Gln Gln Leu Ser Asn Leu		15
	20	25
Val Leu Gln Glu Leu Asn Ala Asn Leu Ser Asn Leu Thr Ser Ala Phe		30

35				40				45							
Glu	Lys	Ala	Thr	Ala	Glu	Lys	Ile	Lys	Cys	Gln	Gln	Glu	Ala	Asp	Ala
50				55				60							
Thr	Asn	Arg	Val	Ile	Leu	Leu	Ala	Asn	Arg	Leu	Val	Gly	Gly	Leu	Ala
65				70				75				80			
Ser	Glu	Asn	Ile	Arg	Trp	Ala	Glu	Ser	Val	Glu	Asn	Phe	Arg	Ser	Gln
85				90				95							
Gly	Val	Thr	Leu	Cys	Gly	Asp	Val	Leu	Ile	Ser	Ala	Phe	Val	Ser	
100				105				110							
Tyr	Val	Gly	Tyr	Phe	Thr	Lys	Lys	Tyr	Arg	Asn	Glu	Leu	Met	Glu	Lys
115				120				125							
Phe	Trp	Ile	Pro	Tyr	Ile	His	Asn	Leu	Lys	Val	Pro	Ile	Pro	Ile	Thr
130				135				140							
Asn	Gly	Leu	Asp	Pro	Leu	Ser	Leu	Leu	Thr	Asp	Asp	Ala	Asp	Val	Ala
145				150				155				160			
Thr	Trp	Asn	Asn	Gln	Gly	Leu	Pro	Ser	Asp	Arg	Met	Ser	Thr	Glu	Asn
165				170				175							
Ala	Thr	Ile	Leu	Gly	Asn	Thr	Glu	Arg	Trp	Pro	Leu	Ile	Val	Asp	Ala
180				185				190							
Gln	Leu	Gln	Gly	Ile	Lys	Trp	Ile	Lys	Asn	Lys	Tyr	Arg	Ser	Glu	Leu
195				200				205							
Lys	Ala	Ile	Arg	Leu	Gly	Gln	Lys	Ser	Tyr	Leu	Asp	Val	Ile	Glu	Gln
210				215				220							
Ala	Thr	Ser	Glu	Gly	Asp	Thr	Leu	Leu	Ile	Glu	Asn	Ile	Gly	Glu	Thr
225				230				235				240			
Val	Asp	Pro	Ala	Leu	Asp	Pro	Leu	Leu	Gly	Arg	Asn	Thr	Ile	Lys	Lys
245				250				255							
Gly	Lys	Tyr	Ile	Lys	Ile	Gly	Asp	Lys	Glu	Val	Gly	Val	Pro	Pro	Gln
260				265				270							
Val	Pro	Pro	Asp	Pro	Thr	His	Gln	Val	Leu	Gln	Pro	Thr	Leu	Gln	Ala
275				280				285							
Arg	Asp	Ala	Gly	Ser	Val	His	Leu	Ile	Asn	Phe	Leu	Val	Thr	Arg	Asp
290				295				300							
Gly	Leu	Glu	Asp	Gln	Leu	Leu	Ala	Ala	Val	Val	Ala	Lys	Glu	Arg	Pro
305				310				315				320			
Asp	Leu	Glu	Gln	Leu	Lys	Ala	Asn	Leu	Thr	Lys	Ser	Gln	Asn	Glu	Phe
325				330				335							
Lys	Ile	Val	Leu	Lys	Glu	Leu	Glu	Asp	Ser	Leu	Leu	Ala	Arg	Leu	Ser
340				345				350							
Ala	Ala	Ser	Gly	Asn	Phe	Leu	Gly	Asp	Thr	Ala	Leu	Val	Glu	Asn	Leu
355				360				365							
Glu	Thr	Thr	Lys	His	Thr	Ala	Ser	Glu	Ile	Glu	Glu	Lys	Val	Val	Glu
370				375				380							
Ala	Lys	Ile	Thr	Glu	Val	Lys	Ile	Asn	Glu	Ala	Arg	Glu	Asn	Tyr	Arg
385				390				395				400			
Pro	Ala	Ala	Glu	Arg	Ala	Ser	Leu	Leu	Tyr	Phe	Ile	Leu	Asn	Asp	Leu
405				410				415							
Asn	Lys	Ile	Asn	Pro	Val	Tyr	Gln	Phe	Ser	Leu	Lys	Ala	Phe	Asn	Val
420				425				430							
Val	Phe	Glu	Lys	Ala	Ile	Gln	Arg	Thr	Thr	Pro	Ala	Asn	Glu	Val	Lys
435				440				445							
Gln	Arg	Val	Ile	Asn	Leu	Thr	Asp	Glu	Ile	Thr	Tyr	Ser	Val	Tyr	Met
450				455				460							
Tyr	Thr	Ala	Arg	Gly	Leu	Phe	Glu	Arg	Asp	Lys	Leu	Ile	Phe	Leu	Ala
465				470				475				480			
Gln	Val	Thr	Phe	Gln	Val	Leu	Ser	Met	Lys	Lys	Glu	Leu	Asn	Pro	Val
485				490				495							
Glu	Leu	Asp	Phe	Leu	Leu	Arg	Phe	Pro	Phe	Lys	Ala	Gly	Val	Val	Ser
500				505				510							
Pro	Val	Asp	Phe	Leu	Gln	His	Gln	Gly	Trp	Gly	Gly	Ile	Lys	Ala	Leu
515				520				525							
Ser	Glu	Met	Asp	Glu	Phe	Lys	Asn	Leu	Asp	Ser	Asp	Ile	Glu	Gly	Ser
530				535				540							
Ala	Lys	Arg	Trp	Lys	Lys	Leu	Val	Glu	Ser	Glu	Ala	Pro	Glu	Lys	Glu

545					550					555				560
Ile	Phe	Pro	Lys	Glu	Trp	Lys	Asn	Lys	Thr	Ala	Leu	Gln	Lys	Leu
				565					570					575
Met	Val	Arg	Cys	Leu	Arg	Pro	Asp	Arg	Met	Thr	Tyr	Ala	Ile	Lys
			580					585						590
Phe	Val	Glu	Glu	Lys	Met	Gly	Ser	Lys	Phe	Val	Glu	Gly	Arg	Ser
		595					600					605		
Glu	Phe	Ser	Lys	Ser	Tyr	Glu	Glu	Ser	Ser	Pro	Ser	Thr	Ser	Ile
	610					615					620			Phe
Phe	Ile	Leu	Ser	Pro	Gly	Val	Asp	Pro	Leu	Lys	Asp	Val	Glu	Ala
	625				630					635				640
Gly	Lys	Lys	Leu	Gly	Phe	Thr	Ile	Asp	Asn	Gly	Lys	Leu	His	Asn
			645					650						655
Ser	Leu	Gly	Gln	Gly	Gln	Glu	Val	Val	Ala	Glu	Asn	Ala	Leu	Asp
		660						665						670
Ala	Ala	Glu	Lys	Gly	His	Trp	Val	Ile	Leu	Gln	Asn	Ile	His	Leu
	675					680					685			Val
Ala	Arg	Trp	Leu	Gly	Thr	Leu	Asp	Lys	Lys	Leu	Glu	Arg	Tyr	Ser
	690				695						700			Thr
Gly	Arg	His	Glu	Asp	Tyr	Arg	Val	Phe	Ile	Arg	Ala	Glu	Pro	Ala
	705				710					715				720
Ser	Pro	Glu	Thr	His	Ile	Ile	Pro	Gln	Gly	Ile	Leu	Glu	Asn	Ala
			725					730						735
Lys	Ile	Thr	Asn	Glu	Pro	Pro	Thr	Gly	Met	Tyr	Ala	Asn	Leu	Tyr
		740						745						750
Ala	Leu	Asp	Leu	Phe	Thr	Gln	Asp	Thr	Leu	Glu	Met	Cys	Thr	Lys
	755					760					765			Glu
Met	Glu	Phe	Lys	Cys	Met	Leu	Phe	Ala	Leu	Cys	Tyr	Phe	His	Ala
	770				775						780			Val
Val	Ala	Glu	Arg	Arg	Lys	Phe	Gly	Ala	Gln	Gly	Trp	Asn	Arg	Ser
	785				790					795				800
Pro	Phe	Asn	Asn	Gly	Asp	Leu	Thr	Ile	Ser	Ile	Asn	Val	Leu	Tyr
			805					810						815
Tyr	Leu	Glu	Ala	Asn	Pro	Lys	Val	Pro	Trp	Asp	Asp	Leu	Arg	Tyr
		820						825						830
Phe	Gly	Glu	Ile	Met	Tyr	Gly	Gly	His	Ile	Thr	Asp	Asp	Trp	Asp
	835					840					845			Arg
Arg	Leu	Cys	Arg	Thr	Tyr	Leu	Ala	Glu	Tyr	Ile	Arg	Thr	Glu	Met
	850					855					860			Leu
Glu	Gly	Asp	Val	Leu	Leu	Ala	Pro	Gly	Phe	Gln	Ile	Pro	Pro	Asn
	865				870				875					880
Asp	Tyr	Lys	Gly	Tyr	His	Glu	Tyr	Ile	Asp	Glu	Asn	Leu	Pro	Pro
			885					890						895
Ser	Pro	Tyr	Leu	Tyr	Gly	Leu	His	Pro	Asn	Ala	Glu	Ile	Gly	Phe
		900						905						910
Thr	Val	Thr	Ser	Glu	Lys	Leu	Phe	Arg	Thr	Val	Leu	Glu	Met	Gln
	915						920					925		Pro
Lys	Glu	Thr	Asp	Ser	Gly	Ala	Gly	Thr	Gly	Val	Ser	Arg	Glu	Glu
	930				935						940			Lys
Val	Lys	Ala	Val	Leu	Asp	Asp	Ile	Leu	Glu	Lys	Ile	Pro	Glu	Thr
	945				950				955					960
Asn	Met	Ala	Glu	Ile	Met	Ala	Lys	Ala	Ala	Glu	Lys	Thr	Pro	Tyr
			965					970						975
Val	Val	Ala	Phe	Gln	Glu	Cys	Glu	Arg	Met	Asn	Ile	Leu	Thr	Asn
		980						985					990	Glu
Met	Arg	Arg	Ser	Leu	Lys	Glu	Leu	Asn	Leu	Gly	Leu	Lys	Gly	Glu
	995						1000					1005		Leu
Thr	Ile	Thr	Thr	Asp	Val	Glu	Asp	Leu	Ser	Thr	Ala	Leu	Phe	Tyr
	1010				1015					1020				Asp
Thr	Val	Pro	Asp	Thr	Trp	Val	Ala	Arg	Ala	Tyr	Pro	Ser	Met	Met
	1025				1030				1035					Gly
Leu	Ala	Ala	Trp	Tyr	Ala	Asn	Leu	Leu	Leu	Arg	Ile	Arg	Glu	Leu
			1045					1050					1055	Glu
Ala	Trp	Thr	Thr	Asp	Phe	Ala	Leu	Pro	Thr	Thr	Val	Trp	Leu	Ala
														Gly

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<210> 2984
<211> 489
<212> PRT
<213> Homo sapiens
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4657

275	280	285
Gly Pro Asp Gly Lys Glu	Leu Ile Pro Gln Glu Ser	Pro Arg Val Gly
290	295	300
Gly Phe Gly Phe Val Ala Thr	Pro Ser Pro Ala Pro Gly	Val Asn Glu
305	310	315
Ser Pro Met Met Thr Trp Gly	Glu Val Glu Asn Thr	Pro Leu Arg Val
320	325	330
Glu Gly Ser Glu Thr Pro Tyr	Val Asp Arg Thr Pro Gly	Pro Ala Phe
335	340	345
Lys Ile Leu Glu Pro Gly Arg	Arg Glu Arg Leu Gly Leu	Lys Met Ala
350	355	360
Asn Glu Ala Ala Ala Lys Asn	Arg Ala Lys Lys Gln Glu	Ala Leu Arg
365	370	375
Arg Val Thr Glu Asn Leu Ala	Ser Leu Thr Pro Lys Gly	Leu Ser Pro
380	385	390
Ala Met Ser Pro Ala Leu Gln	Arg Leu Val Ser Arg Thr	Ala Ser Lys
395	400	405
Tyr Thr Asp Arg Ala Leu Arg	Ala Ser Tyr Thr Pro Ser	Pro Ala Arg
410	415	420
Ser Thr His Leu Lys Asn Pro	Gly Pro Val Gly Cys Arg	Pro Pro Gln
425	430	435
Ser Thr Pro Gly Ala Pro Gly	Ser Ala Thr Arg Thr Pro	Leu Thr Gln
440	445	450
Asp Pro Ala Ser Ile Thr Asp	Asn Leu Leu Gln Leu Pro	Ala Arg Arg
455	460	465
Lys Ala Ser Asp Phe Phe		
465	470	475
		480
485	486	

<210> 2985

<211> 571

<212> PRT

<213> Homo sapiens

<400> 2985

Ala Ser Thr Gln Glu Ala Gly	Leu Leu Ser Pro Pro Gly	Val Gly Ala
1	5	10
Gln Arg Cys Trp Asn Phe Val	Ala Cys Leu Pro Val Arg	Ala Cys Ala
20	25	30
Asp Met Ala Ser Asn Asp Tyr	Thr Gln Gln Ala Thr Gln	Ser Tyr Gly
35	40	45
Ala Tyr Pro Thr Gln Pro Gly	Gln Gly Tyr Ser Gln Gln	Ser Ser Gln
50	55	60
Pro Tyr Gly Gln Gln Ser Tyr	Ser Gly Tyr Ser Gln Ser	Thr Asp Thr
65	70	75
Ser Gly Tyr Gly Gln Ser Ser	Tyr Ser Ser Tyr Gly Gln	Ser Gln Asn
80	85	90
Ser Tyr Gly Thr Gln Ser Thr	Pro Gln Gly Tyr Gly Ser	Thr Gly Gly
100	105	110
Tyr Gly Ser Ser Gln Ser Ser	Gln Ser Ser Tyr Gly Gln	Gln Ser Ser
115	120	125
Tyr Pro Gly Tyr Gly Gln Gln	Pro Ala Pro Ser Ser Thr	Ser Gly Ser
130	135	140
Tyr Gly Ser Ser Ser Gln Ser	Ser Ser Tyr Gly Gln Pro	Gln Ser Gly
145	150	155
Ser Tyr Ser Gln Gln Pro Ser	Tyr Gly Gly Gln Gln Gln	Ser Tyr Gly
160	165	170
Gln Gln Gln Ser Tyr Asn Pro	Pro Arg Gly Tyr Gly Gln	Gln Asn Gln
175	180	185
Tyr Asn Ser Ser Ser Gly Gly	Gly Gly Gly Gly Gly Gly	Gly Gly Ser
190	195	200
Tyr Gly Gln Asp Gln Ser Ser	Met Ser Gly Ser Gly Gly	Gly Gly Gly
205		

210	215	220
Gly Gly Gly Gly Gly Gly Ser Gly Gly Gly Gly Tyr Gly Asn Gln		
225	230	235
Asp Gln Thr Gly Ala Ala Gly Ser Arg Gly Tyr Arg Gln Gln Asp Arg		
	245	250
Gly Gly Arg Cys Arg Gly Gly Ser Gly Gly Gly Ser Gly Gly Ala		
	260	265
Ala Gly Tyr Asn Arg Ser Ser Gly Gly Tyr Glu Pro Arg Gly Arg Gly		
	275	280
Gly Gly Arg Gly Gly Arg Gly Gly Met Gly Gly Ser Asp Arg Gly Gly		
	290	295
Phe Asn Lys Phe Gly Gly Pro Arg Asp Gln Gly Ser Arg His Asp Ser		
305	310	315
Glu Gln Asp Asn Ser Asp Asn Asn Thr Ile Phe Val Gln Gly Leu Gly		
	325	330
Glu Asn Val Thr Ile Glu Ser Val Ala Asp Tyr Phe Lys Gln Ile Gly		
	340	345
Ile Ile Lys Thr Asn Lys Lys Thr Gly Gln Pro Met Ile Asn Leu Tyr		
	355	360
Thr Asp Arg Glu Thr Gly Lys Leu Lys Gly Glu Ala Thr Val Ser Phe		
	370	375
Asp Asp Pro Pro Ser Ala Lys Ala Ala Ile Asp Trp Phe Asp Gly Lys		
385	390	395
Glu Phe Ser Gly Asn Pro Ile Lys Val Ser Phe Ala Thr Arg Arg Ala		
	405	410
Asp Phe Asn Arg Gly Gly Gly Asn Gly Arg Gly Gly Arg Gly Arg Gly		
	420	425
Gly Pro Met Gly Arg Gly Gly Tyr Gly Gly Gly Gly Ser Gly Gly Gly		
	435	440
Gly Arg Gly Gly Phe Pro Ser Gly Gly Gly Gly Gly Gly Gly Gln Gln		
	450	455
Arg Ala Gly Asp Trp Lys Cys Pro Asn Pro Thr Cys Glu Asn Met Asn		
465	470	475
Phe Ser Trp Arg Asn Glu Cys Asn Gln Cys Lys Ala Pro Lys Pro Asp		
	485	490
Gly Pro Gly Gly Gly Pro Gly Gly Ser His Met Gly Gly Asn Tyr Gly		
	500	505
Asp Asp Arg Arg Gly Gly Arg Gly Gly Tyr Asp Arg Gly Gly Tyr Arg		
	515	520
Gly Arg Gly Gly Asp Arg Gly Gly Phe Arg Gly Gly Arg Gly Gly Gly		
	530	535
Asp Arg Gly Gly Phe Gly Pro Gly Lys Met Asp Ser Arg Gly Glu His		
545	550	555
Arg Gln Asp Arg Arg Glu Arg Pro Tyr		
	565	569

<210> 2986
 <211> 571
 <212> PRT
 <213> Homo sapiens

<400> 2986
 Ala Ser Thr Gln Glu Ala Gly Leu Leu Ser Pro Pro Gly Val Gly Ala
 1 5 10 15
 Gln Arg Cys Trp Asn Phe Val Ala Cys Leu Pro Val Arg Ala Cys Ala
 20 25 30
 Asp Met Ala Ser Asn Asp Tyr Thr Gln Gln Ala Thr Gln Ser Tyr Gly
 35 40 45
 Ala Tyr Pro Thr Gln Pro Gly Gln Gly Tyr Ser Gln Gln Ser Ser Gln
 50 55 60
 Pro Tyr Gly Gln Gln Ser Tyr Ser Gly Tyr Ser Gln Ser Thr Asp Thr

65				70					75				80		
Ser	Gly	Tyr	Gly	Gln	Ser	Ser	Tyr	Ser	Ser	Tyr	Gly	Gln	Ser	Gln	Asn
				85					90					95	
Ser	Tyr	Gly	Thr	Gln	Ser	Thr	Pro	Gln	Gly	Tyr	Gly	Ser	Thr	Gly	Gly
			100					105					110		
Tyr	Gly	Ser	Ser	Gln	Ser	Ser	Gln	Ser	Ser	Tyr	Gly	Gln	Gln	Ser	Ser
		115					120					125			
Tyr	Pro	Gly	Tyr	Gly	Gln	Gln	Pro	Ala	Pro	Ser	Ser	Thr	Ser	Gly	Ser
	130					135					140				
Tyr	Gly	Ser	Ser	Ser	Gln	Ser	Ser	Ser	Tyr	Gly	Gln	Pro	Gln	Ser	Gly
145					150					155				160	
Ser	Tyr	Ser	Gln	Gln	Pro	Ser	Tyr	Gly	Gly	Gln	Gln	Gln	Ser	Tyr	Gly
			165						170					175	
Gln	Gln	Gln	Ser	Tyr	Asn	Pro	Pro	Arg	Gly	Tyr	Gly	Gln	Gln	Asn	Gln
			180					185					190		
Tyr	Asn	Ser	Ser	Ser	Gly	Gly	Gly	Gly	Gly	Gly	Gly	Gly	Gly	Gly	Ser
	195						200					205			
Tyr	Gly	Gln	Asp	Gln	Ser	Ser	Met	Ser	Gly	Ser	Gly	Gly	Gly	Gly	Gly
	210						215				220				
Gly	Gly	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Gly	Tyr	Gly	Asn	Gln
225					230						235			240	
Asp	Gln	Thr	Gly	Ala	Ala	Gly	Ser	Arg	Gly	Tyr	Arg	Gln	Gln	Asp	Arg
			245						250					255	
Gly	Gly	Arg	Cys	Arg	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Ala
		260						265					270		
Ala	Gly	Tyr	Asn	Arg	Ser	Ser	Gly	Gly	Tyr	Glu	Pro	Arg	Gly	Arg	Gly
	275						280					285			
Gly	Gly	Arg	Gly	Gly	Arg	Gly	Gly	Met	Gly	Gly	Ser	Asp	Arg	Gly	Gly
	290					295					300				
Phe	Asn	Lys	Phe	Gly	Gly	Pro	Arg	Asp	Gln	Gly	Ser	Arg	His	Asp	Ser
305					310					315				320	
Glu	Gln	Asp	Asn	Ser	Asp	Asn	Asn	Thr	Ile	Phe	Val	Gln	Gly	Leu	Gly
			325						330					335	
Glu	Asn	Val	Thr	Ile	Glu	Ser	Val	Ala	Asp	Tyr	Phe	Lys	Gln	Ile	Gly
			340					345					350		
Ile	Ile	Lys	Thr	Asn	Lys	Lys	Thr	Gly	Gln	Pro	Met	Ile	Asn	Leu	Tyr
	355						360					365			
Thr	Asp	Arg	Glu	Thr	Gly	Lys	Leu	Lys	Gly	Glu	Ala	Thr	Val	Ser	Phe
	370					375					380				
Asp	Asp	Pro	Pro	Ser	Ala	Lys	Ala	Ala	Ile	Asp	Trp	Phe	Asp	Gly	Lys
385					390					395				400	
Glu	Phe	Ser	Gly	Asn	Pro	Ile	Lys	Val	Ser	Phe	Ala	Thr	Arg	Arg	Ala
			405						410					415	
Asp	Phe	Asn	Arg	Gly	Gly	Gly	Asn	Gly	Arg	Gly	Gly	Arg	Gly	Arg	Gly
		420						425				430			
Gly	Pro	Met	Gly	Arg	Gly	Gly	Tyr	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly
	435						440					445			
Gly	Arg	Gly	Gly	Phe	Pro	Ser	Gly	Gly	Gly	Gly	Gly	Gly	Gly	Gln	Gln
	450					455					460				
Arg	Ala	Gly	Asp	Trp	Lys	Cys	Pro	Asn	Pro	Thr	Cys	Glu	Asn	Met	Asn
465					470					475				480	
Phe	Ser	Trp	Arg	Asn	Glu	Cys	Asn	Gln	Cys	Lys	Ala	Pro	Lys	Pro	Asp
			485						490					495	
Gly	Pro	Gly	Gly	Gly	Pro	Gly	Gly	Ser	His	Met	Gly	Gly	Asn	Tyr	Gly
		500						505					510		
Asp	Asp	Arg	Arg	Gly	Gly	Arg	Gly	Gly	Tyr	Asp	Arg	Gly	Gly	Tyr	Arg
	515						520					525			
Gly	Arg	Gly	Gly	Asp	Arg	Gly	Gly	Phe	Arg	Gly	Gly	Arg	Gly	Gly	Gly
	530					535					540				
Asp	Arg	Gly	Gly	Phe	Gly	Pro	Gly	Lys	Met	Asp	Ser	Arg	Gly	Glu	His
545					550					555				560	
Arg	Gln	Asp	Arg	Arg	Glu	Arg	Pro	Tyr							
			565					569							

<210> 2987
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 2987
 Gly Gly Ala Lys Ala Gly Gly Ala Pro His Pro Phe Thr Leu Pro Phe
 1 5 10 15
 Arg His Val Gly Gly Leu Ser Ala Ala Pro Glu Glu Val Glu Gly Met
 20 25 30
 Leu Trp Ala Gly Ala Arg Gln His Gly Arg Asn Trp Arg Lys Arg Glu
 35 40 45
 Thr Ser Pro Gly Thr Gln Gly Pro Leu Pro Pro Val Pro Arg Val Pro
 50 55 60
 Pro Gly Pro Asp Gly Pro His Ala Ile Ala Pro Thr Leu Ser Trp Ala
 65 70 75 80
 Ile Pro Arg Gln Gln Cys Ser Pro Gln Pro Gly Arg Leu Asn Ala Leu
 85 90 95
 Pro Pro Asp Arg Cys Ser Gly Pro His Phe Gly Asp Arg Ala Pro Glu
 100 105 110
 Ser Cys Phe Pro Gly Ala Cys Ser Val Ser Gly Ala Cys Ala Phe Lys
 115 120 125
 Gly Thr Arg Pro Ala Cys Pro Pro Gln Glu Pro Ser Leu Arg Ser Ser
 130 135 140
 Arg Asn Arg Leu Arg Glu Gly Gln Thr Phe Gly Arg Met Glu Ile
 145 150 155 159

<210> 2988
 <211> 339
 <212> PRT
 <213> Homo sapiens

<400> 2988
 Met Gly Asn Asp Ser Val Ser Tyr Glu Tyr Gly Asp Tyr Ser Asp Leu
 1 5 10 15
 Ser Asp Arg Pro Val Asp Cys Leu Asp Gly Ala Cys Leu Ala Ile Asp
 20 25 30
 Pro Leu Arg Val Ala Pro Leu Pro Leu Tyr Ala Ala Ile Phe Leu Val
 35 40 45
 Gly Val Pro Gly Asn Ala Met Val Ala Trp Val Ala Gly Lys Val Ala
 50 55 60
 Arg Arg Arg Val Gly Ala Thr Trp Leu Leu His Leu Ala Val Ala Asp
 65 70 75 80
 Leu Leu Cys Cys Leu Ser Leu Pro Ile Leu Ala Val Pro Ile Ala Arg
 85 90 95
 Gly Gly His Trp Pro Tyr Gly Ala Val Gly Cys Arg Ala Leu Pro Ser
 100 105 110
 Ile Ile Leu Leu Thr Met Tyr Ala Ser Val Leu Leu Leu Ala Ala Leu
 115 120 125
 Ser Ala Asp Leu Cys Phe Leu Ala Leu Gly Pro Ala Trp Cys Leu Arg
 130 135 140
 Phe Ser Gly Ala Cys Gly Val Gln Val Ala Cys Gly Ala Ala Trp Thr
 145 150 155 160
 Leu Ala Leu Leu Leu Thr Val Pro Ser Ala Ile Tyr Arg Arg Leu His
 165 170 175
 Gln Glu His Phe Pro Ala Arg Leu Gln Cys Val Val Asp Tyr Gly Gly
 180 185 190
 Ser Ser Ser Thr Glu Asn Ala Val Thr Ala Ile Arg Phe Leu Phe Gly

195 200 205
 Phe Leu Gly Pro Leu Val Ala Val Ala Ser Cys His Ser Ala Leu Leu
 210 215 220
 Cys Trp Ala Ala Arg Arg Cys Arg Pro Leu Gly Thr Ala Ile Val Val
 225 230 235 240
 Gly Phe Phe Val Cys Trp Ala Pro Tyr His Leu Leu Gly Leu Val Leu
 245 250 255
 Thr Val Ala Ala Pro Asn Ser Ala Leu Leu Ala Arg Ala Leu Arg Ala
 260 265 270
 Glu Pro Leu Ile Val Gly Leu Ala Leu Ala His Ser Cys Leu Asn Pro
 275 280 285
 Met Leu Phe Leu Tyr Phe Gly Arg Ala Gln Leu Arg Arg Ser Leu Pro
 290 295 300
 Ala Ala Cys His Trp Ala Leu Arg Glu Ser Gln Gly Gln Asp Glu Ser
 305 310 315 320
 Val Asp Ser Lys Lys Ser Thr Ser His Asp Leu Val Ser Glu Met Glu
 325 330 335
 Val
 337

<210> 2989
 <211> 1350
 <212> PRT
 <213> Homo sapiens

<400> 2989
 Lys Ser Gln Leu Phe Cys Phe Trp Val Gly Lys Ala Gly Asp Ile Leu
 1 5 10 15
 Ser Gly Asp Gln Asp Lys Glu Gln Lys Asp Pro Tyr Phe Val Glu Thr
 20 25 30
 Pro Tyr Gly Tyr Gln Leu Asp Leu Asp Phe Leu Lys Tyr Val Asp Asp
 35 40 45
 Ile Gln Lys Gly Asn Thr Ile Lys Arg Leu Asn Ile Gln Lys Arg Arg
 50 55 60
 Lys Pro Ser Val Pro Cys Pro Glu Pro Arg Thr Thr Ser Gly Gln Gln
 65 70 75 80
 Gly Ile Trp Thr Ser Thr Glu Ser Leu Ser Ser Ser Asn Ser Asp Asp
 85 90 95
 Asn Lys Gln Cys Pro Asn Phe Leu Ile Ala Arg Ser Gln Val Thr Ser
 100 105 110
 Thr Pro Ile Ser Lys Pro Pro Pro Pro Leu Glu Thr Ser Leu Pro Phe
 115 120 125
 Leu Thr Ile Pro Glu Asn Arg Gln Leu Pro Pro Pro Ser Pro Gln Leu
 130 135 140
 Pro Lys His Asn Leu His Val Thr Lys Thr Leu Met Glu Thr Arg Arg
 145 150 155 160
 Arg Leu Glu Gln Glu Arg Ala Thr Met Gln Met Thr Pro Gly Glu Phe
 165 170 175
 Arg Arg Pro Arg Leu Ala Ser Phe Gly Gly Met Gly Thr Thr Ser Ser
 180 185 190
 Leu Pro Ser Phe Val Gly Ser Gly Asn His Asn Pro Ala Lys His Gln
 195 200 205
 Leu Gln Asn Gly Tyr Gln Gly Asn Gly Asp Tyr Gly Ser Tyr Ala Pro
 210 215 220
 Ala Ala Pro Thr Thr Ser Ser Met Gly Ser Ser Ile Arg His Ser Pro
 225 230 235 240
 Leu Ser Ser Gly Ile Ser Thr Pro Val Thr Asn Val Ser Pro Met His
 245 250 255
 Leu Gln His Ile Arg Glu Gln Met Ala Ile Ala Leu Lys Arg Leu Lys
 260 265 270
 Glu Leu Glu Glu Gln Val Arg Thr Ile Pro Val Leu Gln Val Lys Ile

4663

785					790					795				800
Val	Gly	Glu	Ser	Leu	Glu	Asn	Pro	Gln	Pro	Gln	Ala	Pro	Leu	Gly Met
				805					810					815
Met	Thr	Gly	Leu	Asp	His	Tyr	Ile	Glu	Arg	Ile	Gln	Lys	Leu	Leu Ala
			820					825					830	
Glu	Gln	Gln	Thr	Leu	Leu	Ala	Glu	Asn	Tyr	Ser	Glu	Leu	Ala	Glu Ala
		835					840					845		
Phe	Gly	Glu	Pro	His	Ser	Gln	Met	Gly	Ser	Leu	Asn	Ser	Gln	Leu Ile
	850					855					860			
Ser	Thr	Leu	Ser	Ser	Ile	Asn	Ser	Val	Met	Lys	Ser	Ala	Ser	Thr Glu
865					870					875				880
Glu	Leu	Arg	Asn	Pro	Asp	Phe	Gln	Lys	Thr	Ser	Leu	Gly	Lys	Ile Thr
			885						890					895
Gly	Ser	Tyr	Leu	Gly	Tyr	Thr	Cys	Lys	Cys	Gly	Gly	Leu	Gln	Ser Gly
			900					905					910	
Ser	Pro	Leu	Ser	Ser	Gln	Thr	Ser	Gln	Pro	Glu	Gln	Glu	Val	Gly Thr
	915					920						925		
Ser	Glu	Gly	Lys	Pro	Ile	Ser	Ser	Leu	Asp	Ala	Phe	Pro	Thr	Gln Glu
930					935					940				
Gly	Thr	Leu	Ser	Pro	Val	Asn	Leu	Thr	Asp	Asp	Gln	Ile	Ala	Ala Gly
945				950					955					960
Leu	Tyr	Ala	Cys	Thr	Asn	Asn	Glu	Ser	Thr	Leu	Lys	Ser	Ile	Met Lys
			965						970					975
Lys	Lys	Asp	Gly	Asn	Lys	Asp	Ser	Asn	Gly	Ala	Lys	Lys	Asn	Leu Gln
		980						985					990	
Phe	Val	Gly	Ile	Asn	Gly	Gly	Tyr	Glu	Thr	Thr	Ser	Ser	Asp	Asp Ser
	995					1000					1005			
Ser	Ser	Asp	Glu	Ser	Ser	Ser	Ser	Glu	Ser	Asp	Asp	Glu	Cys	Asp Val
	1010				1015					1020				
Ile	Glu	Tyr	Pro	Leu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Glu	Asp Thr
1025				1030					1035				1040	
Arg	Gly	Met	Ala	Glu	Gly	His	His	Ala	Val	Asn	Ile	Glu	Gly	Leu Lys
			1045					1050					1055	
Ser	Ala	Arg	Val	Glu	Asp	Glu	Met	Gln	Val	Gln	Glu	Cys	Glu	Pro Glu
		1060					1065					1070		
Lys	Val	Glu	Ile	Arg	Glu	Arg	Tyr	Glu	Leu	Ser	Glu	Lys	Met	Leu Ser
	1075					1080					1085			
Ala	Cys	Asn	Leu	Leu	Lys	Asn	Thr	Ile	Asn	Asp	Pro	Lys	Ala	Leu Thr
	1090				1095					1100				
Ser	Lys	Asp	Met	Arg	Phe	Cys	Leu	Asn	Thr	Leu	Gln	His	Glu	Trp Phe
1105			1110						1115				1120	
Arg	Val	Ser	Ser	Gln	Lys	Ser	Ala	Ile	Pro	Ala	Met	Val	Gly	Asp Tyr
		1125						1130					1135	
Ile	Ala	Ala	Phe	Glu	Ala	Ile	Ser	Pro	Asp	Val	Leu	Arg	Tyr	Val Ile
	1140					1145					1150			
Asn	Leu	Ala	Asp	Gly	Asn	Gly	Asn	Thr	Ala	Leu	His	Tyr	Ser	Val Ser
	1155				1160					1165				
His	Ser	Asn	Phe	Glu	Ile	Val	Lys	Leu	Leu	Leu	Asp	Ala	Asp	Val Cys
	1170				1175					1180				
Asn	Val	Asp	His	Gln	Asn	Lys	Ala	Gly	Tyr	Thr	Pro	Ile	Met	Leu Ala
1185			1190					1195					1200	
Ala	Leu	Ala	Ala	Val	Glu	Ala	Glu	Lys	Asp	Met	Arg	Ile	Val	Glu Glu
		1205					1210					1215		
Leu	Phe	Gly	Cys	Gly	Asp	Val	Asn	Ala	Lys	Ala	Ser	Gln	Ala	Gly Gln
	1220					1225					1230			
Thr	Ala	Leu	Met	Leu	Ala	Val	Ser	His	Gly	Arg	Ile	Asp	Met	Val Lys
	1235					1240					1245			
Gly	Leu	Leu	Ala	Cys	Gly	Ala	Asp	Val	Asn	Ile	Gln	Asp	Asp	Glu Gly
	1250				1255				1260					
Ser	Thr	Ala	Leu	Met	Cys	Ala	Ser	Glu	His	Gly	His	Val	Glu	Ile Val
1265				1270				1275					1280	
Lys	Leu	Leu	Leu	Ala	Gln	Pro	Gly	Cys	Asn	Gly	His	Leu	Glu	Asp Asn
		1285						1290				1295		
Asp	Gly	Ser	Thr	Ala	Leu	Ser	Ile	Ala	Leu	Glu	Ala	Gly	His	Lys Asp

1300 1305 1310
 Ile Ala Val Leu Leu Tyr Ala His Val Asn Phe Ala Lys Ala Gln Ser
 1315 1320 1325
 Pro Gly Thr Pro Arg Leu Gly Arg Lys Thr Ser Pro Gly Pro Thr His
 1330 1335 1340
 Arg Gly Ser Phe Asp
 1345 1349

<210> 2990
 <211> 541
 <212> PRT
 <213> Homo sapiens

<400> 2990
 Glu Arg Leu Arg Pro Gly Gln Arg Ala Ile Arg Gly Pro Val Pro Ala
 1 5 10 15
 Ala Gly Ala Cys Ala Ser Leu Pro Pro Arg Ala Gly Pro Ala Gln Gly
 20 25 30
 Arg His Ala Ala Leu Gly Gly Ala Glu Pro Gly Ser His Leu His Cys
 35 40 45
 Gly Val Arg Leu Gln Arg Arg Glu Glu Pro Gly Gly Gln Gln Arg Leu
 50 55 60
 Leu Pro Gln Arg Gly Gly Ser Ala Gln Thr Gly His Gln His Pro Gly
 65 70 75 80
 Pro Tyr Glu Cys Gln Cys Pro Gly Pro Gln Pro Gly Gly Thr Thr Pro
 85 90 95
 Ala Leu Leu Ser Leu Ile Leu Glu Glu Thr Arg Gly Pro Pro Ala Ser
 100 105 110
 Ala Asn Pro Asp Lys Asp His Ser Thr Gln Pro Gly Thr Met Gly Arg
 115 120 125
 Lys Lys Ile Gln Ile Ser Arg Ile Leu Asp Gln Arg Asn Arg Gln Val
 130 135 140
 Thr Phe Thr Lys Arg Lys Phe Gly Leu Met Lys Lys Ala Tyr Glu Leu
 145 150 155 160
 Ser Val Leu Cys Asp Cys Glu Ile Ala Leu Ile Ile Phe Asn Ser Ala
 165 170 175
 Thr Arg Leu Phe Gln Tyr Ala Ser Thr Asp Met Asp Arg Val Leu Leu
 180 185 190
 Lys Tyr Thr Glu Tyr Ser Glu Pro His Glu Ser Arg Thr Asn Thr Asp
 195 200 205
 Ile Leu Glu Thr Leu Lys Arg Arg Gly Ile Gly Leu Asp Gly Pro Glu
 210 215 220
 Leu Glu Pro Asp Glu Gly Pro Glu Glu Pro Gly Glu Lys Phe Arg Arg
 225 230 235 240
 Leu Ala Gly Glu Gly Gly Asp Pro Ala Leu Pro Arg Pro Arg Leu Tyr
 245 250 255
 Pro Ala Ala Pro Ala Met Pro Ser Pro Asp Val Val Tyr Gly Ala Leu
 260 265 270
 Pro Pro Pro Gly Cys Asp Pro Ser Gly Leu Gly Glu Ala Leu Pro Ala
 275 280 285
 Gln Ser Arg Pro Ser Pro Phe Arg Pro Ala Ala Pro Lys Ala Gly Pro
 290 295 300
 Pro Gly Leu Gly His Pro Leu Phe Ser Pro Ser His Leu Thr Ser Lys
 305 310 315 320
 Thr Pro Pro Pro Leu Tyr Leu Pro Thr Glu Gly Arg Arg Ser Asp Leu
 325 330 335
 Pro Gly Gly Leu Ala Gly Pro Arg Gly Gly Leu Asn Thr Ser Arg Ser
 340 345 350
 Leu Tyr Ser Gly Leu Gln Asn Pro Cys Ser Thr Ala Thr Pro Gly Pro
 355 360 365
 Pro Leu Gly Ser Phe Pro Phe Leu Pro Gly Gly Pro Pro Val Gly Ala


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      370              375              380
Glu Ala Trp Ala Arg Arg Val Pro Gln Pro Ala Ala Pro Pro Arg Arg
385              390              395              400
Pro Pro Gln Ser Ser Ile Lys Ser Glu Arg Leu Phe Leu Arg Pro Pro
      405              410              415
Gly Ala Pro Ala Thr Phe Leu Arg Pro Ser Pro Ile Pro Cys Ser Ser
      420              425              430
Pro Gly Pro Trp Gln Ser Leu Cys Gly Leu Gly Pro Pro Cys Ala Gly
      435              440              445
Cys Pro Trp Pro Thr Ala Gly Pro Gly Arg Arg Ser Pro Gly Gly Thr
      450              455              460
Ser Pro Glu Arg Ser Pro Gly Thr Ala Arg Ala Arg Gly Asp Pro Thr
465              470              475              480
Ser Leu Gln Ala Phe Ser Glu Lys Thr His Thr Val Thr Ala Pro Leu
      485              490              495
Arg Gly Gly Gly Leu Glu Val Gly Gly Trp Thr Gln Ser Ser Ala Gly
      500              505              510
Gly Leu Leu Ser Phe Phe Leu Phe Val Cys Ile Ser Thr Asn Lys Asn
      515              520              525
Ala Arg Gly Val Arg Gly Pro Glu Lys Lys
530              535              538

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<210> 2991
 <211> 386
 <212> PRT
 <213> Homo sapiens

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      <400> 2991
Ile Pro Gln Pro Leu His Cys Ala Ser Pro Lys Glu Glu Met Ser Leu
  1              5              10              15
Arg Cys Gly Asp Ala Ala Arg Thr Leu Gly Pro Arg Val Phe Gly Arg
      20              25              30
Tyr Phe Cys Ser Pro Val Arg Pro Leu Ser Ser Leu Pro Asp Lys Lys
      35              40              45
Lys Glu Leu Leu Gln Asn Gly Pro Asp Leu Gln Asp Phe Val Ser Gly
      50              55              60
Asp Leu Ala Asp Arg Ser Thr Trp Asp Glu Tyr Lys Gly Asn Leu Lys
      65              70              75              80
Arg Gln Lys Gly Glu Arg Leu Arg Leu Pro Trp Leu Lys Thr Glu
      85              90              95
Ile Pro Met Gly Lys Asn Tyr Asn Lys Leu Lys Asn Thr Leu Arg Asn
      100             105             110
Leu Asn Leu His Thr Val Cys Glu Glu Ala Arg Cys Pro Asn Ile Gly
      115             120             125
Glu Cys Trp Gly Gly Gly Glu Tyr Ala Thr Ala Thr Ala Thr Ile Met
      130             135             140
Leu Met Gly Asp Thr Cys Thr Arg Gly Cys Arg Phe Cys Ser Val Lys
145             150             155             160
Thr Ala Arg Asn Pro Pro Pro Leu Asp Ala Ser Glu Pro Tyr Asn Thr
      165             170             175
Ala Lys Ala Ile Ala Glu Trp Gly Leu Asp Tyr Val Val Leu Thr Ser
      180             185             190
Val Asp Arg Asp Asp Met Pro Asp Gly Gly Ala Glu His Ile Ala Lys
      195             200             205
Thr Val Ser Tyr Leu Lys Glu Arg Asn Pro Lys Ile Leu Val Glu Cys
      210             215             220
Leu Thr Pro Asp Phe Arg Gly Asp Leu Lys Ala Ile Glu Lys Val Ala
225             230             235             240
Leu Ser Gly Leu Asp Val Tyr Ala His Asn Val Glu Thr Val Pro Glu
      245             250             255
Leu Gln Ser Lys Val Arg Asp Pro Arg Ala Asn Phe Asp Gln Ser Leu

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<210> 2992
<211> 545
<212> PRT
<213> Homo sapiens
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4667

290	295	300
Glu Pro Gly Asp Thr Lys Tyr	Glu Ile His Arg Asp Pro Thr Leu Asp	
305	310	315
Pro Ser Leu Met Glu Met Thr	Glu Ala Ala Leu Arg Leu Leu Ser Arg	
325	330	335
Asn Pro Arg Gly Phe Tyr Leu Phe	Val Glu Gly Gly Arg Ile Asp His	
340	345	350
Gly His His Glu Gly Val Ala Tyr	Gln Ala Leu Thr Glu Ala Val Met	
355	360	365
Phe Asp Asp Ala Ile Glu Arg Ala	Gly Gln Leu Thr Ser Glu Glu Asp	
370	375	380
Thr Leu Thr Leu Val Thr Ala Asp	His Ser His Val Phe Ser Phe Gly	
385	390	395
Gly Tyr Thr Leu Arg Gly Ser Ser	Ile Phe Gly Leu Ala Pro Ser Lys	
405	410	415
Ala Gln Asp Ser Lys Ala Tyr Thr	Ser Ile Leu Tyr Gly Asn Gly Pro	
420	425	430
Gly Tyr Val Phe Asn Ser Gly Val	Arg Pro Asp Val Asn Glu Ser Glu	
435	440	445
Ser Gly Ser Pro Asp Tyr His Gln	Gln Ala Gly Val Pro Leu Ser Ser	
450	455	460
Glu Thr His Gly Gly Glu Asp Val	Ala Val Phe Ala Arg Gly Pro Gln	
465	470	475
Ala His Leu Val His Gly Val Gln	Glu Gln Ser Phe Val Ala His Val	
485	490	495
Met Ala Phe Ala Ala Cys Leu Glu	Pro Tyr Thr Ala Cys Asp Leu Ala	
500	505	510
Pro Pro Ala Cys Thr Thr Asp Ala	Ala His Pro Val Ala Ala Ser Leu	
515	520	525
Pro Leu Leu Ala Gly Thr Leu Leu	Leu Leu Gly Ala Ser Ala Ala Pro	
530	535	540
		544

<210> 2993
 <211> 229
 <212> PRT
 <213> Homo sapiens

<400> 2993

Asp Ala Trp Ala Arg Leu Leu Lys Met Asn Arg Leu Phe Gly Lys Ala	
1	5 10 15
Lys Pro Lys Ala Pro Pro Pro Ser Leu Thr Asp Cys Ile Gly Thr Val	
20	25 30
Asp Ser Arg Ala Glu Ser Ile Asp Lys Lys Ile Ser Arg Leu Asp Ala	
35	40 45
Glu Leu Val Lys Tyr Lys Asp Gln Ile Lys Lys Met Arg Glu Gly Pro	
50	55 60
Ala Lys Asn Met Val Lys Gln Lys Ala Leu Arg Val Leu Lys Gln Lys	
65	70 75 80
Arg Met Tyr Glu Gln Gln Arg Asp Asn Leu Ala Asn Ser His Ser Thr	
85	90 95
Trp Thr Ser His Tyr Thr Ile Gln Ser Leu Lys Asp Thr Lys Thr Thr	
100	105 110
Val Asp Ala Met Lys Leu Gly Val Lys Glu Met Lys Lys Ala Tyr Lys	
115	120 125
Gln Val Lys Ile Asp Gln Ile Glu Asp Leu Gln Asp Gln Leu Glu Asp	
130	135 140
Met Met Glu Asp Ala Asn Glu Ile Gln Glu Ala Leu Ser Arg Ser Tyr	
145	150 155 160
Gly Thr Pro Glu Leu Asp Glu Asp Asp Leu Glu Ala Glu Leu Asp Ala	

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<210> 2994
<211> 517
<212> PRT
<213> Homo sapiens
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4669

355	360	365
Glu Ile Pro Pro Ala Ser Pro Glu Met Ala Gln Met Arg Lys Gln Cys		
370	375	380
Leu Asp Tyr His His Gln Glu Met Gln Ala Leu Lys Glu Val Phe Lys		
385	390	395
Glu Tyr Leu Ile Glu Leu Phe Phe Leu Gln His Phe Gln Gly Asn Met		400
	405	410
Met Asp Phe Leu Ala Phe Lys Glu Arg Leu Tyr Gly Pro Leu Gln Ala		415
	420	425
Tyr Leu Arg Gln Asn Asp Leu Asp Ile Glu Glu Glu Glu Glu Glu His		430
	435	440
Phe Glu Val Ile Asn Asp Glu Val Lys Val Val Ala Arg Lys His Gly		445
	450	455
Gln Pro Gly Thr Pro Val Ala Ile Ala Thr Gln Leu Pro Pro Arg Thr		460
465	470	475
Ser Ala Ala Phe Pro Ala Gln Gln Gln Pro Leu Gln Val Leu Ser Asp		480
	485	490
Gly Ser Thr Val Gln Leu Pro Arg Leu Ser Ser Leu Gly Phe Glu Asp		495
	500	505
Ser Met Cys		510
515		

<210> 2995
 <211> 308
 <212> PRT
 <213> Homo sapiens

<400> 2995

Ser Ala Pro Ser Gly Ile Asp Ala Ser Thr His Ala Phe Ala Arg Cys	
1	5
Lys His Pro Ile Asn Val Arg Arg Asp Pro Ser Ile Pro Ile Tyr Gly	
	20
Leu Arg Gln Ser Ile Leu Leu Asn Thr Arg Leu Gln Asp Cys Tyr Val	
	35
Asp Ser Pro Ala Leu Thr Asn Ile Trp Met Ala Arg Thr Cys Ala Lys	
	50
Gln Asn Ile Asn Ala Pro Ala Pro Ala Thr Thr Ser Ser Trp Glu Val	
	65
Val Arg Asn Pro Leu Ile Ala Ser Ser Phe Ser Leu Val Lys Leu Val	
	80
Leu Arg Arg Gln Leu Lys Asn Lys Cys Cys Pro Pro Pro Cys Lys Phe	
	95
Gly Glu Gly Lys Leu Ser Lys Arg Leu Lys His Lys Asp Asp Ser Val	
	110
Met Lys Ala Thr Gln Gln Ala Arg Lys Arg Asn Phe Ile Ser Ser Lys	
	125
Ser Lys Gln Pro Ala Gly His Arg Arg Pro Ala Gly Gly Ile Arg Glu	
	140
145	150
Ser Lys Glu Ser Ser Lys Glu Lys Lys Leu Thr Val Arg Gln Asp Leu	
	165
Glu Asp Arg Tyr Ala Glu His Val Ala Ala Thr Gln Ala Leu Pro Gln	
	180
Asp Ser Gly Thr Ala Ala Trp Lys Gly Arg Val Leu Leu Pro Glu Thr	
	195
Gln Lys Arg Gln Gln Leu Ser Glu Asp Thr Leu Thr Ile His Gly Leu	
	210
Pro Thr Glu Gly Tyr Gln Ala Leu Tyr His Ala Val Val Glu Pro Met	
	225
Leu Trp Asn Pro Ser Gly Thr Pro Lys Arg Tyr Ser Leu Glu Leu Gly	
	240
	245
Lys Ala Ile Lys Gln Lys Leu Trp Glu Ala Leu Cys Ser Gln Gly Ala	
	255

260 265 270
 Ile Ser Glu Gly Ala Gln Arg Asp Arg Phe Pro Gly Arg Lys Gln Pro
 275 280 285
 Gly Val His Glu Glu Pro Val Leu Lys Lys Trp Pro Lys Leu Lys Ser
 290 295 300
 Lys Lys
 305 306

<210> 2996
 <211> 573
 <212> PRT
 <213> Homo sapiens

<400> 2996
 Gly Lys Phe Gly Ile Lys Pro Ser Gln Arg Arg Ile Ser Gly Lys Ser
 1 5 10 15
 Thr Phe His Ser Glu Met Glu Gly Glu Asp Thr Arg Asp Asp Ser Leu
 20 25 30
 Tyr Ser Ile Leu Glu Glu Leu Trp Gln Asp Ala Glu Gln Ile Lys Arg
 35 40 45
 Cys Gln Glu Lys His Asn Lys Leu Leu Ser Arg Thr Thr Phe Leu Asn
 50 55 60
 Lys Lys Ile Leu Asn Thr Glu Trp Asp Tyr Glu Tyr Lys Asp Phe Gly
 65 70 75 80
 Lys Phe Val His Pro Ser Pro Asn Leu Ile Leu Ser Gln Lys Arg Pro
 85 90 95
 His Lys Arg Asp Ser Phe Gly Lys Ser Phe Lys His Asn Leu Asp Leu
 100 105 110
 His Ile His Asn Lys Ser Asn Ala Ala Lys Asn Leu Asp Lys Thr Ile
 115 120 125
 Gly His Gly Gln Val Phe Thr Gln Asn Ser Ser Tyr Ser His His Glu
 130 135 140
 Asn Thr His Thr Gly Val Lys Phe Cys Glu Arg Asn Gln Cys Gly Lys
 145 150 155 160
 Val Leu Ser Leu Lys His Ser Leu Ser Gln Asn Val Lys Phe Pro Ile
 165 170 175
 Gly Glu Lys Ala Asn Thr Cys Thr Glu Phe Gly Lys Ile Phe Thr Gln
 180 185 190
 Arg Ser His Phe Phe Ala Pro Gln Lys Ile His Thr Val Glu Lys Pro
 195 200 205
 His Glu Leu Ser Lys Cys Val Asn Val Phe Thr Gln Lys Pro Leu Leu
 210 215 220
 Ser Ile Tyr Leu Arg Val His Arg Asp Glu Lys Leu Tyr Ile Cys Thr
 225 230 235 240
 Lys Met Cys Gly Lys Gly Leu His Pro Arg Asn Ser Glu Leu Ile Met
 245 250 255
 His Glu Lys Thr His Thr Arg Glu Lys Pro Tyr Lys Cys Asn Glu Cys
 260 265 270
 Gly Lys Ser Phe Phe Gln Val Ser Ser Leu Leu Arg His Gln Thr Thr
 275 280 285
 His Thr Gly Glu Lys Leu Phe Glu Cys Ser Glu Cys Gly Lys Gly Phe
 290 295 300
 Ser Leu Asn Ser Ala Leu Asn Ile His Gln Lys Ile His Thr Gly Glu
 305 310 315 320
 Arg His His Lys Cys Ser Glu Cys Gly Lys Ala Phe Thr Gln Lys Ser
 325 330 335
 Thr Leu Arg Met His Gln Arg Ile His Thr Gly Glu Arg Ser Tyr Ile
 340 345 350
 Cys Thr Gln Cys Gly Gln Ala Phe Ile Gln Lys Ala His Leu Ile Ala
 355 360 365
 His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Ser Asp Cys

370	375	380
Gly Lys Ser Phe Pro Ser Lys Ser Gln Leu Gln Met His Lys Arg Ile		
385	390	395
His Thr Gly Glu Lys Pro Tyr Ile Cys Thr Glu Cys Gly Lys Ala Phe		400
	405	410
Thr Asn Arg Ser Asn Leu Asn Thr His Gln Lys Ser His Thr Gly Glu		415
	420	425
Lys Ser Tyr Ile Cys Ala Glu Cys Gly Lys Ala Phe Thr Asp Arg Ser		430
	435	440
Asn Phe Asn Lys His Gln Thr Ile His Thr Gly Glu Lys Pro Tyr Val		445
	450	455
Cys Ala Asp Cys Gly Arg Ala Phe Ile Gln Lys Ser Glu Leu Ile Thr		460
465	470	475
His Gln Arg Ile His Thr Thr Glu Lys Pro Tyr Lys Cys Pro Asp Cys		480
	485	490
Glu Lys Ser Phe Ser Lys Lys Pro His Leu Lys Val His Gln Arg Ile		495
	500	505
His Thr Gly Glu Lys Pro Tyr Ile Cys Ala Glu Cys Gly Lys Ala Phe		510
	515	520
Thr Asp Arg Ser Asn Phe Asn Lys His Gln Thr Ile His Thr Gly Asp		525
	530	535
Lys Pro Tyr Lys Cys Ser Asp Cys Gly Lys Gly Phe Thr Gln Lys Ser		540
545	550	555
Val Leu Ser Met His Arg Asn Ile His Thr		560
	565	570

<210> 2997
 <211> 591
 <212> PRT
 <213> Homo sapiens

<400> 2997

Ala Ala Ser Thr Arg Thr Met Gly Ser Arg His Phe Glu Gly Ile Tyr	
1	5
Asp His Val Gly His Phe Gly Arg Phe Gln Arg Val Leu Tyr Phe Ile	10
	20
Cys Ala Phe Gln Asn Ile Ser Cys Gly Ile His Tyr Leu Ala Ser Val	25
	30
Phe Met Gly Val Thr Pro His His Val Cys Arg Pro Pro Gly Asn Val	35
	40
Ser Gln Val Val Phe His Asn His Ser Asn Trp Ser Leu Glu Asp Thr	45
	50
Gly Ala Leu Leu Ser Ser Gly Gln Lys Asp Tyr Val Thr Val Gln Leu	55
	60
Gln Asn Gly Glu Ile Trp Glu Leu Ser Arg Cys Ser Arg Asn Lys Arg	65
	70
Glu Asn Thr Ser Ser Leu Gly Tyr Glu Tyr Thr Gly Ser Lys Lys Glu	75
	80
Phe Pro Cys Val Asp Gly Tyr Ile Tyr Asp Gln Asn Thr Trp Lys Ser	85
	90
Thr Ala Val Thr Gln Trp Asn Leu Val Cys Asp Arg Lys Trp Leu Ala	95
	100
Met Leu Ile Gln Pro Leu Phe Met Phe Gly Gly Pro Thr Gly Ile Gly	105
	110
Val Thr Phe Gly Tyr Phe Ser Asp Arg Leu Gly Arg Arg Val Val Leu	115
	120
Trp Ala Thr Ser Ser Ser Met Phe Leu Phe Gly Ile Ala Ala Ala Phe	125
	130
Ala Val Asp Tyr Tyr Thr Phe Met Ala Ala Arg Phe Phe Leu Ala Met	135
	140
Val Ala Ser Gly Tyr Leu Val Val Gly Phe Val Tyr Val Met Glu Phe	145
	150
	155
	160
	165
	170
	175
	180
	185
	190
	195
	200
	205
	210
	215
	220

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225                230                235                240
Ile Gly Met Lys Ser Arg Thr Trp Ala Ser Val His Leu His Ser Phe
                245                250                255
Phe Ala Val Gly Thr Leu Leu Val Ala Leu Thr Gly Tyr Leu Val Arg
                260                265                270
Thr Trp Trp Leu Tyr Gln Met Ile Leu Ser Thr Val Thr Val Pro Phe
                275                280                285
Ile Leu Cys Cys Trp Val Leu Pro Glu Thr Pro Phe Trp Leu Leu Ser
                290                295                300
Glu Gly Arg Tyr Glu Glu Ala Gln Lys Ile Val Asp Ile Met Ala Lys
305                310                315                320
Trp Asn Arg Ala Ser Ser Cys Lys Leu Ser Glu Leu Leu Ser Leu Asp
                325                330                335
Leu Gln Gly Pro Val Ser Asn Ser Pro Thr Glu Val Gln Lys His Asn
                340                345                350
Leu Ser Tyr Leu Phe Tyr Asn Trp Ser Ile Thr Lys Arg Thr Leu Thr
                355                360                365
Val Trp Leu Ile Trp Phe Thr Gly Ser Leu Gly Phe Tyr Ser Phe Ser
                370                375                380
Leu Asn Ser Val Asn Leu Gly Gly Asn Glu Tyr Leu Asn Leu Phe Leu
385                390                395                400
Leu Gly Val Val Glu Ile Pro Ala Tyr Thr Phe Val Cys Ile Ala Met
                405                410                415
Asp Lys Val Gly Arg Arg Thr Val Leu Ala Tyr Ser Leu Phe Cys Ser
                420                425                430
Ala Leu Ala Cys Gly Val Val Met Val Ile Pro Gln Lys His Tyr Ile
                435                440                445
Leu Gly Val Val Thr Ala Met Val Gly Lys Ile Leu Pro Ile Gly Ala
                450                455                460
Ala Phe Gly Leu Ile Tyr Leu Tyr Thr Ala Glu Leu Tyr Pro Thr Ile
465                470                475                480
Val Arg Ser Leu Ala Val Gly Ser Gly Ser Met Val Cys Arg Leu Ala
                485                490                495
Ser Ile Leu Ala Pro Phe Ser Val Asp Leu Ser Ser Ile Trp Ile Phe
                500                505                510
Ile Pro Gln Leu Phe Val Gly Thr Met Ala Leu Leu Ser Gly Val Leu
                515                520                525
Thr Leu Lys Leu Pro Glu Thr Leu Gly Lys Arg Leu Ala Thr Thr Trp
                530                535                540
Glu Glu Ala Ala Lys Leu Glu Ser Glu Asn Glu Ser Lys Ser Ser Lys
545                550                555                560
Leu Leu Leu Thr Thr Asn Asn Ser Gly Leu Glu Lys Thr Glu Ala Ile
                565                570                575
Thr Pro Arg Asp Ser Gly Leu Gly Glu
                580                585

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<210> 2998

<211> 480

<212> PRT

<213> Homo sapiens

<400> 2998

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Gln Arg Pro Ala Ser Gln Leu Leu Ala Pro Phe Ala Ala Glu Ala Leu
1                5                10                15
Pro Gly Ala Pro Arg Ala Ala Met Ala Gln His Phe Ser Leu Ala Ala
                20                25                30
Cys Asp Val Val Gly Phe Asp Leu Asp His Thr Leu Cys Arg Tyr Asn
                35                40                45
Leu Pro Glu Ser Ala Pro Leu Ile Tyr Asn Ser Phe Ala Gln Phe Leu
50                55                60
Val Lys Glu Lys Gly Tyr Asp Lys Glu Leu Leu Asn Val Thr Pro Glu

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65					70					75				80	
Asp	Trp	Asp	Phe	Cys	Cys	Lys	Gly	Leu	Ala	Leu	Asp	Leu	Glu	Asp	Gly
				85					90					95	
Asn	Phe	Leu	Lys	Leu	Ala	Asn	Asn	Gly	Thr	Val	Leu	Arg	Ala	Ser	His
			100					105					110		
Gly	Thr	Lys	Met	Met	Thr	Pro	Glu	Val	Leu	Ala	Glu	Ala	Tyr	Gly	Lys
		115					120					125			
Lys	Glu	Trp	Lys	His	Phe	Leu	Ser	Asp	Thr	Gly	Met	Ala	Cys	Arg	Ser
		130				135					140				
Gly	Lys	Tyr	Tyr	Phe	Tyr	Asp	Asn	Tyr	Phe	Asp	Leu	Pro	Gly	Ala	Leu
145					150					155					160
Leu	Cys	Ala	Arg	Val	Val	Asp	Tyr	Leu	Thr	Lys	Leu	Asn	Asn	Gly	Gln
			165					170						175	
Lys	Thr	Phe	Asp	Phe	Trp	Lys	Asp	Ile	Val	Ala	Ala	Ile	Gln	His	Asn
		180						185					190		
Tyr	Lys	Met	Ser	Ala	Phe	Lys	Glu	Asn	Cys	Gly	Ile	Tyr	Phe	Pro	Glu
		195					200					205			
Ile	Lys	Arg	Asp	Pro	Gly	Arg	Tyr	Leu	His	Ser	Arg	Pro	Glu	Ser	Val
		210				215					220				
Lys	Lys	Trp	Leu	Arg	Gln	Leu	Lys	Asn	Ala	Gly	Lys	Ile	Leu	Leu	Leu
225					230					235					240
Ile	Thr	Ser	Ser	His	Ser	Asp	Tyr	Cys	Arg	Leu	Leu	Cys	Ala	Tyr	Ile
			245					250						255	
Leu	Gly	Asn	Asp	Phe	Thr	Asp	Leu	Phe	Asp	Ile	Val	Ile	Thr	Asn	Ala
		260						265					270		
Leu	Lys	Pro	Gly	Phe	Phe	Ser	His	Leu	Pro	Ser	Gln	Arg	Pro	Phe	Arg
		275					280					285			
Thr	Leu	Glu	Asn	Asp	Glu	Glu	Gln	Glu	Ala	Leu	Pro	Ser	Leu	Asp	Lys
		290				295					300				
Pro	Gly	Trp	Tyr	Ser	Gln	Gly	Asn	Ala	Val	His	Leu	Tyr	Glu	Leu	Leu
305					310					315					320
Lys	Lys	Met	Thr	Gly	Lys	Pro	Glu	Pro	Lys	Val	Val	Tyr	Phe	Gly	Asp
			325					330						335	
Ser	Met	His	Ser	Asp	Ile	Phe	Pro	Ala	Arg	His	Tyr	Ser	Asn	Trp	Glu
		340						345					350		
Thr	Val	Leu	Ile	Leu	Glu	Glu	Leu	Arg	Gly	Asp	Glu	Gly	Thr	Arg	Ser
		355					360					365			
Gln	Arg	Pro	Glu	Glu	Ser	Glu	Pro	Leu	Glu	Lys	Lys	Gly	Lys	Tyr	Glu
		370				375					380				
Gly	Pro	Lys	Ala	Lys	Pro	Leu	Asn	Thr	Ser	Ser	Lys	Lys	Trp	Gly	Ser
385					390					395					400
Phe	Phe	Ile	Asp	Ser	Val	Leu	Gly	Leu	Glu	Asn	Thr	Glu	Asp	Ser	Leu
			405					410					415		
Val	Tyr	Thr	Trp	Ser	Cys	Lys	Arg	Ile	Ser	Thr	Tyr	Ser	Thr	Ile	Ala
		420						425					430		
Ile	Pro	Ser	Ile	Glu	Ala	Ile	Ala	Glu	Leu	Pro	Leu	Asp	Tyr	Lys	Phe
		435				440						445			
Thr	Arg	Phe	Ser	Ser	Ser	Asn	Ser	Lys	Thr	Ala	Gly	Tyr	Tyr	Pro	Asn
		450				455					460				
Pro	Pro	Leu	Val	Leu	Ser	Ser	Asp	Glu	Thr	Leu	Ile	Ser	Lys		
465					470					475			478		

<210> 2999

<211> 699

<212> PRT

<213> Homo sapiens

<400> 2999

Leu	Arg	Arg	Arg	Lys	Met	Thr	Pro	Gln	Ser	Leu	Leu	Gln	Thr	Thr	Leu
1				5				10				15			
Phe	Leu	Leu	Ser	Leu	Leu	Phe	Leu	Val	Gln	Gly	Ala	His	Gly	Arg	Gly

4675

530	535	540
Asp Asn Tyr Gly Pro Ile Ile Leu Ala Val His Arg Thr Pro Glu Gly		
545	550	555
Val Ile Tyr Pro Ser Met Cys Trp Ile Arg Asp Ser Leu Val Ser Tyr		560
	565	570
Ile Thr Asn Leu Gly Leu Phe Ser Leu Val Phe Leu Phe Asn Met Ala		575
	580	585
Met Leu Ala Thr Met Val Val Gln Ile Leu Arg Leu Arg Pro His Thr		590
	595	600
Gln Lys Trp Ser His Val Leu Thr Leu Leu Cys Leu Ser Leu Val Leu		605
	610	615
Gly Leu Pro Trp Ala Leu Ile Phe Phe Ser Phe Ala Ser Gly Thr Phe		620
625	630	635
Gln Leu Val Val Leu Tyr Leu Phe Ser Ile Ile Thr Ser Phe Gln Gly		640
	645	650
Phe Leu Ile Phe Ile Trp Tyr Trp Ser Met Arg Leu Gln Ala Arg Gly		655
	660	665
Gly Pro Ser Pro Leu Lys Ser Asn Ser Asp Ser Ala Arg Leu Pro Ile		670
	675	680
Ser Ser Gly Ser Thr Ser Ser Ser Arg Ile		685
	690	695
		698

<210> 3000
 <211> 313
 <212> PRT
 <213> Homo sapiens

<400> 3000

Ser Arg Gly Gln Leu Asp Ala Gly Gln Ser Ser Glu Gln His Gly Gly		
1	5	10
Asn Arg Gln Pro Glu Gln Ser Arg Ser Arg Ser Ser Ser Ser Ser Ser		15
	20	25
Ser Pro Arg Arg Ser Arg Ser Ala Ala Glu Pro Ala Met Ala Leu Ser		30
	35	40
Met Pro Leu Asn Gly Leu Lys Glu Glu Asp Lys Glu Pro Leu Ile Glu		45
	50	55
Leu Phe Val Lys Ala Gly Ser Asp Gly Glu Ser Ile Gly Asn Cys Pro		60
65	70	75
Phe Ser Gln Arg Leu Phe Met Ile Leu Trp Leu Lys Gly Val Val Phe		80
	85	90
Ser Val Thr Thr Val Asp Leu Lys Arg Lys Pro Ala Asp Leu Gln Asn		95
	100	105
Leu Ala Pro Gly Thr His Pro Pro Phe Ile Thr Phe Asn Ser Glu Val		110
	115	120
Lys Thr Asp Val Asn Lys Ile Glu Glu Phe Leu Glu Glu Val Leu Cys		125
	130	135
Pro Pro Lys Tyr Leu Lys Leu Ser Pro Lys His Pro Glu Ser Asn Thr		140
145	150	155
Ala Gly Met Asp Ile Phe Ala Lys Phe Ser Ala Tyr Ile Lys Asn Ser		160
	165	170
Arg Pro Glu Ala Asn Glu Ala Leu Glu Arg Gly Leu Leu Lys Thr Leu		175
	180	185
Gln Lys Leu Asp Glu Tyr Leu Asn Ser Pro Leu Pro Asp Glu Ile Asp		190
	195	200
Glu Asn Ser Met Glu Asp Ile Lys Phe Ser Thr Arg Lys Phe Leu Asp		205
	210	215
Gly Asn Glu Met Thr Leu Ala Asp Cys Asn Leu Leu Pro Lys Leu His		220
225	230	235
Ile Val Lys Val Val Ala Lys Lys Tyr Arg Asn Phe Asp Ile Pro Lys		240
	245	250
Glu Met Thr Gly Ile Trp Arg Tyr Leu Thr Asn Ala Tyr Ser Arg Asp		255

35				40				45							
Met	Arg	Leu	Lys	Met	Thr	Thr	Arg	Asn	Phe	Pro	Glu	Arg	Glu	Val	Pro
50						55					60				
Cys	Asp	Val	Glu	Val	Glu	Arg	Phe	Thr	Arg	Glu	Val	Pro	Cys	Leu	Ser
65					70					75					80
Ser	Leu	Gly	Asp	Gly	Trp	Asp	Cys	Glu	Asn	Gln	Glu	Gly	His	Leu	Arg
				85					90					95	
Gln	Ser	Ala	Leu	Thr	Leu	Glu	Lys	Pro	Gly	Thr	Gln	Glu	Ala	Ile	Cys
			100					105					110		
Glu	Tyr	Pro	Gly	Phe	Gly	Glu	His	Leu	Ile	Ala	Ser	Ser	Asp	Leu	Pro
		115					120					125			
Pro	Ser	Gln	Arg	Val	Leu	Ala	Thr	Asn	Gly	Phe	His	Ala	Pro	Asp	Ser
	130				135						140				
Asn	Val	Ser	Gly	Leu	Asp	Cys	Asp	Pro	Ala	Leu	Pro	Ser	Tyr	Pro	Lys
145					150					155					160
Ser	Tyr	Ala	Asp	Lys	Arg	Thr	Gly	Asp	Ser	Asp	Ala	Cys	Gly	Lys	Gly
			165					170						175	
Phe	Asn	His	Ser	Met	Glu	Val	Ile	His	Gly	Arg	Asn	Pro	Val	Arg	Glu
			180					185					190		
Lys	Pro	Tyr	Lys	Tyr	Pro	Glu	Ser	Val	Lys	Ser	Phe	Asn	His	Phe	Thr
	195						200					205			
Ser	Leu	Gly	His	Gln	Lys	Ile	Met	Lys	Arg	Gly	Lys	Lys	Ser	Tyr	Glu
	210				215						220				
Gly	Lys	Asn	Phe	Glu	Asn	Ile	Phe	Thr	Leu	Ser	Ser	Ser	Leu	Asn	Glu
225					230					235					240
Asn	Gln	Arg	Asn	Leu	Pro	Gly	Glu	Lys	Gln	Tyr	Arg	Cys	Thr	Glu	Cys
			245						250					255	
Gly	Lys	Cys	Phe	Lys	Arg	Asn	Ser	Ser	Leu	Val	Leu	His	His	Arg	Thr
			260					265					270		
His	Thr	Gly	Glu	Lys	Pro	Tyr	Thr	Cys	Asn	Glu	Cys	Gly	Lys	Ser	Phe
	275						280					285			
Ser	Lys	Asn	Tyr	Asn	Leu	Ile	Val	His	Gln	Arg	Ile	His	Thr	Gly	Glu
	290				295						300				
Lys	Pro	Tyr	Glu	Cys	Ser	Lys	Cys	Gly	Lys	Ala	Phe	Ser	Asp	Gly	Ser
305					310					315					320
Ala	Leu	Thr	Gln	His	Gln	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu
			325						330					335	
Cys	Leu	Glu	Cys	Gly	Lys	Thr	Phe	Asn	Arg	Asn	Ser	Ser	Leu	Ile	Leu
			340					345					350		
His	Gln	Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Arg	Cys	Asn	Glu	Cys
	355						360					365			
Gly	Lys	Pro	Phe	Thr	Asp	Ile	Ser	His	Leu	Thr	Val	His	Leu	Arg	Ile
	370					375					380				
His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Ser	Lys	Cys	Gly	Lys	Ala	Phe
385					390					395					400
Arg	Asp	Gly	Ser	Tyr	Leu	Thr	Gln	His	Glu	Arg	Thr	His	Thr	Gly	Glu
			405						410					415	
Lys	Pro	Phe	Glu	Cys	Ala	Glu	Cys	Gly	Lys	Ser	Phe	Asn	Arg	Asn	Ser
			420					425					430		
His	Leu	Ile	Val	His	Gln	Lys	Ile	His	Ser	Gly	Glu	Lys	Pro	Tyr	Glu
	435						440					445			
Cys	Lys	Glu	Cys	Gly	Lys	Thr	Phe	Ile	Glu	Ser	Ala	Tyr	Leu	Ile	Arg
	450					455					460				
His	Gln	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Gly	Cys	Asn	Gln	Cys
465					470					475					480
Gln	Lys	Leu	Phe	Arg	Asn	Ile	Ala	Gly	Leu	Ile	Arg	His	Gln	Arg	Thr
			485						490					495	
His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Asn	Gln	Cys	Gly	Lys	Ala	Phe
	500							505					510		
Arg	Asp	Ser	Ser	Cys	Leu	Thr	Lys	His	Gln	Arg	Ile	His	Thr	Lys	Glu
	515						520					525			
Thr	Pro	Tyr	Gln	Cys	Pro	Glu	Cys	Gly	Lys	Ser	Phe	Lys	Gln	Asn	Ser
	530					535					540				
His	Leu	Ala	Val	His	Gln	Arg	Leu	His	Ser	Arg	Glu	Gly	Pro	Ser	Arg

545 550 555 560
 Cys Pro Gln Cys Gly Lys Met Phe Gln Lys Ser Ser Ser Leu Val Arg
 565 570 575
 His Gln Arg Ala His Leu Gly Glu Gln Pro Met Glu Thr Xaa Trp Leu
 580 585 590
 Gly Ala Thr Xaa Val Phe Gln Phe Thr Leu Thr Pro Val Phe Arg Arg
 595 600 605
 Arg Val Leu Asp Leu Thr Pro Leu Trp Ser Val Glu Lys Asn Pro Leu
 610 615 620
 Ser Tyr Pro Val Asn
 625 629

<210> 3003

<211> 495

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1) ... (495)

<223> Xaa = any amino acid or nothing

<400> 3003

Ser Leu Thr Glu His Leu Ser Phe Phe Gln Pro Thr Ala His Ser Leu
 1 5 10 15
 Thr Ser Leu Leu Gly Thr Met Thr Thr Cys Ser Arg Gln Phe Thr Ser
 20 25 30
 Ser Ser Ser Met Lys Gly Ser Cys Gly Ile Gly Gly Gly Ile Gly Gly
 35 40 45
 Gly Ser Ser Arg Ile Ser Ser Val Leu Ala Gly Gly Ser Cys Arg Ala
 50 55 60
 Pro Ser Thr Tyr Gly Gly Gly Leu Ser Val Ser Ser Arg Phe Ser Ser
 65 70 75 80
 Gly Gly Ala Cys Gly Leu Gly Gly Gly Tyr Gly Gly Gly Phe Ser Ser
 85 90 95
 Ser Ser Ser Phe Gly Ser Gly Phe Gly Gly Gly Tyr Gly Gly Gly Leu
 100 105 110
 Gly Ala Gly Phe Gly Gly Gly Leu Gly Ala Gly Phe Gly Gly Gly Phe
 115 120 125
 Ala Gly Gly Asp Gly Leu Leu Val Gly Ser Glu Lys Val Thr Met Gln
 130 135 140
 Asn Leu Asn Asp Arg Leu Ala Ser Tyr Leu Asp Lys Val Arg Ala Leu
 145 150 155 160
 Glu Glu Ala Asn Ala Asp Leu Glu Val Lys Ile Arg Asp Trp Tyr Gln
 165 170 175
 Arg Gln Arg Pro Ser Glu Ile Lys Asp Tyr Ser Pro Tyr Phe Lys Thr
 180 185 190
 Ile Glu Asp Leu Arg Asn Lys Ile Ile Ala Ala Thr Ile Glu Asn Ala
 195 200 205
 Gln Pro Ile Leu Gln Ile Asp Asn Ala Arg Leu Ala Ala Asp Asp Phe
 210 215 220
 Arg Thr Lys Tyr Glu His Glu Leu Ala Leu Arg Gln Thr Val Glu Ala
 225 230 235 240
 Asp Val Asn Gly Leu Arg Arg Val Leu Asp Glu Leu Thr Leu Ala Arg
 245 250 255
 Thr Asp Leu Glu Met Gln Ile Glu Gly Leu Lys Glu Glu Leu Ala Tyr
 260 265 270
 Leu Arg Lys Asn His Xaa Glu Glu Met Leu Ala Leu Arg Gly Gln Thr
 275 280 285
 Gly Gly Glu Val Asn Val Glu Thr Asp Ala Ala Pro Gly Val Asp Leu
 290 295 300
 Ser Cys Ile Leu Asn Glu Met Arg Asn Gln Tyr Glu Gln Met Ala Glu

305				310					315				320		
Lys	Asn	Arg	Arg	Asp	Ala	Glu	Thr	Trp	Phe	Leu	Ser	Lys	Thr	Glu	Glu
				325					330					335	
Leu	Asn	Lys	Glu	Val	Ala	Ser	Asn	Ser	Glu	Leu	Val	Gln	Ser	Ser	Arg
			340					345					350		
Ser	Glu	Val	Thr	Glu	Leu	Arg	Arg	Val	Leu	Gln	Gly	Leu	Glu	Ile	Glu
		355					360					365			
Leu	Gln	Ser	Gln	Leu	Ser	Met	Lys	Ala	Ser	Leu	Glu	Asn	Ser	Leu	Glu
	370					375					380				
Glu	Thr	Lys	Gly	Arg	Tyr	Cys	Met	Gln	Leu	Ser	Gln	Ile	Gln	Gly	Leu
385					390					395				400	
Ile	Gly	Ser	Val	Glu	Glu	Gln	Leu	Ala	Gln	Leu	Arg	Cys	Glu	Met	Glu
			405					410						415	
Gln	Gln	Ser	Gln	Glu	Tyr	Gln	Ile	Leu	Leu	Asp	Val	Lys	Thr	Arg	Leu
			420					425					430		
Glu	Gln	Glu	Ile	Ala	Thr	Tyr	Arg	Arg	Leu	Leu	Glu	Gly	Glu	Asp	Ala
	435					440					445				
His	Leu	Ser	Ser	Gln	Gln	Ala	Ser	Gly	Gln	Ser	Tyr	Ser	Ser	Arg	Glu
	450					455				460					
Val	Phe	Thr	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Arg	Gln	Thr	Arg	Pro	Ile
465					470					475				480	
Leu	Lys	Glu	Gln	Ser	Ser	Ser	Ser	Phe	Ser	Gln	Gly	Gln	Ser	Ser	
			485					490						495	

<210> 3004
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 3004

Gly	Cys	Ala	Pro	Asp	Thr	Arg	Phe	Phe	Val	Pro	Glu	Pro	Gly	Gly	Arg
1				5					10					15	
Gly	Ala	Ala	Pro	Trp	Val	Ala	Leu	Val	Ala	Arg	Gly	Gly	Cys	Thr	Phe
			20					25					30		
Lys	Asp	Lys	Val	Leu	Val	Ala	Ala	Arg	Arg	Asn	Ala	Ser	Ala	Val	Val
		35				40						45			
Leu	Tyr	Asn	Glu	Glu	Arg	Tyr	Gly	Asn	Ile	Thr	Leu	Pro	Met	Ser	His
	50					55					60				
Ala	Gly	Thr	Gly	Asn	Ile	Val	Val	Ile	Met	Ile	Ser	Tyr	Pro	Lys	Gly
65					70					75				80	
Arg	Glu	Ile	Leu	Glu	Leu	Val	Gln	Lys	Gly	Ile	Pro	Val	Thr	Met	Thr
			85					90						95	
Ile	Gly	Val	Gly	Thr	Arg	His	Val	Gln	Glu	Phe	Ile	Ser	Gly	Gln	Ser
			100					105					110		
Val	Val	Phe	Val	Ala	Ile	Ala	Phe	Ile	Thr	Met	Met	Ile	Ile	Ser	Leu
	115					120						125			
Ala	Trp	Leu	Ile	Phe	Tyr	Tyr	Ile	Gln	Arg	Phe	Leu	Tyr	Thr	Gly	Ser
	130					135					140				
Gln	Ile	Gly	Ser	Gln	Ser	His	Arg	Lys	Glu	Thr	Lys	Lys	Val	Ile	Gly
145					150					155				160	
Gln	Leu	Leu	Leu	His	Thr	Val	Lys	His	Gly	Glu	Lys	Gly	Ile	Asp	Val
			165						170					175	
Asp	Ala	Glu	Asn	Cys	Ala	Val	Cys	Ile	Glu	Asn	Phe	Lys	Val	Lys	Asp
		180					185						190		
Ile	Ile	Arg	Ile	Leu	Pro	Cys	Lys	His	Ile	Phe	His	Arg	Ile	Cys	Ile
	195					200						205			
Asp	Pro	Trp	Leu	Leu	Asp	His	Arg	Thr	Cys	Pro	Met	Cys	Lys	Leu	Asp
	210					215					220				
Val	Ile	Lys	Ala	Leu	Gly	Tyr	Trp	Gly	Glu	Pro	Gly	Asp	Val	Gln	Glu
225					230					235				240	
Met	Pro	Ala	Pro	Glu	Ser	Pro	Pro	Gly	Arg	Asp	Pro	Ala	Ala	Asn	Leu

245 250 255
 Ser Leu Ala Leu Pro Asp Asp Asp Gly Ser Asp Glu Ser Ser Pro Pro
 260 265 270
 Ser Ala Ser Pro Ala Glu Ser Glu Pro Gln Cys Asp Pro Ser Phe Lys
 275 280 285
 Gly Asp Ala Gly Glu Asn Thr Ala Leu Leu Glu Ala Gly Arg Ser Asp
 290 295 300
 Ser Arg His Gly Gly Pro Ile Ser
 305 310 312

<210> 3005
 <211> 789
 <212> PRT
 <213> Homo sapiens

<400> 3005
 Thr Met Thr Ile His Gln Phe Leu Leu Leu Phe Leu Phe Trp Val Cys
 1 5 10 15
 Leu Pro His Phe Cys Ser Pro Glu Ile Met Phe Arg Arg Thr Pro Val
 20 25 30
 Pro Gln Gln Arg Ile Leu Ser Ser Arg Val Pro Arg Ser Asp Gly Lys
 35 40 45
 Ile Leu His Arg Gln Lys Arg Gly Trp Met Trp Asn Gln Phe Phe Leu
 50 55 60
 Leu Glu Glu Tyr Thr Gly Ser Asp Tyr Gln Tyr Val Gly Lys Leu His
 65 70 75 80
 Ser Asp Gln Asp Lys Gly Asp Gly Ser Leu Lys Tyr Ile Leu Ser Gly
 85 90 95
 Asp Gly Ala Gly Thr Leu Phe Ile Ile Asp Glu Lys Thr Gly Asp Ile
 100 105 110
 His Ala Thr Arg Arg Ile Asp Arg Glu Glu Lys Ala Phe Tyr Thr Leu
 115 120 125
 Arg Ala Gln Ala Ile Asn Arg Arg Thr Leu Arg Pro Val Glu Pro Glu
 130 135 140
 Ser Glu Phe Val Ile Lys Ile His Asp Ile Asn Asp Asn Glu Pro Thr
 145 150 155 160
 Phe Pro Glu Glu Ile Tyr Thr Ala Ser Val Pro Glu Met Ser Val Val
 165 170 175
 Gly Thr Ser Val Val Gln Val Thr Ala Thr Asp Ala Asp Asp Pro Ser
 180 185 190
 Tyr Gly Asn Ser Ala Arg Val Ile Tyr Ser Ile Leu Gln Gly Gln Pro
 195 200 205
 Tyr Phe Ser Val Glu Pro Glu Thr Gly Ile Ile Arg Thr Ala Leu Pro
 210 215 220
 Asn Met Asn Arg Glu Asn Arg Glu Gln Tyr Gln Val Val Ile Gln Ala
 225 230 235 240
 Lys Asp Met Gly Gly Gln Met Gly Gly Leu Ser Gly Thr Thr Thr Val
 245 250 255
 Asn Ile Thr Leu Thr Asp Val Asn Asp Asn Pro Pro Arg Phe Pro Gln
 260 265 270
 Asn Thr Ile His Leu Arg Val Leu Glu Ser Ser Pro Val Gly Thr Ala
 275 280 285
 Ile Gly Ser Val Lys Ala Thr Asp Ala Asp Thr Gly Lys Asn Ala Glu
 290 295 300
 Val Glu Tyr Arg Ile Ile Asp Gly Asp Gly Thr Asp Met Phe Asp Ile
 305 310 315 320
 Val Thr Glu Lys Asp Thr Gln Glu Gly Ile Ile Thr Val Lys Lys Pro
 325 330 335
 Leu Asp Tyr Glu Ser Arg Arg Leu Tyr Thr Leu Lys Val Glu Ala Glu
 340 345 350
 Asn Thr His Val Asp Pro Arg Phe Tyr Tyr Leu Gly Pro Phe Lys Asp


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<210> 3006
<211> 179
<212> PRT
<213> Homo sapiens
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<400> 3006

Gly Arg Val Asp Lys Thr Trp Trp Gly Lys Ser Val Gly Ile Met Leu
 1 5 10 15
 Thr Glu Leu Glu Lys Ala Leu Asn Ser Ile Ile Asp Val Tyr His Lys
 20 25 30
 Tyr Ser Leu Ile Lys Gly Asn Phe His Ala Val Tyr Arg Asp Asp Leu
 35 40 45
 Lys Lys Leu Leu Glu Thr Glu Cys Pro Gln Tyr Ile Arg Lys Lys Gly
 50 55 60
 Ala Asp Val Trp Phe Lys Glu Leu Asp Ile Asn Thr Asp Gly Ala Val
 65 70 75 80
 Asn Phe Gln Glu Phe Leu Ile Leu Val Ile Lys Met Gly Val Ala Ala
 85 90 95
 Leu Asn Ser Ile Ile Asp Val Tyr His Lys Tyr Ser Leu Ile Lys Gly
 100 105 110
 Asn Phe His Ala Val Tyr Arg Asp Asp Leu Gln Lys Leu Leu Glu Thr
 115 120 125
 Glu Cys Pro Gln Tyr Ile Arg Lys Lys Gly Ala Asp Val Trp Phe Lys
 130 135 140
 Glu Leu Asp Ile Asn Thr Asp Gly Ala Val Asn Phe Gln Glu Phe Leu
 145 150 155 160
 Ile Leu Val Ile Lys Met Gly Val Gly Ser Pro Gln Lys Lys Val Ala
 165 170 175
 Ser Tyr Phe
 179

<210> 3007

<211> 417

<212> PRT

<213> Homo sapiens

<400> 3007

Met Tyr Glu Gly Ile Arg Cys Leu Leu Lys Ala Leu Leu Gly Phe Val
 1 5 10 15
 Ser Leu Ala Ile Gly Thr Leu Tyr Cys Pro Arg Gln Tyr Arg Pro Phe
 20 25 30
 Pro Gly Ser Leu Gly Ile Glu Ala Ile Asn Val Pro Glu Pro Ile Pro
 35 40 45
 Asp Ser Tyr Tyr Arg Asp Met Ala Thr Trp Pro Thr His Ala Pro Ser
 50 55 60
 Val Glu Glu Gly Gly Gln Gly Arg Phe Gly Asn Gln Ala Asp His Phe
 65 70 75 80
 Leu Gly Ser Leu Ala Phe Ala Lys Leu Leu Asn Arg Ser Leu Ala Val
 85 90 95
 Pro Ser Trp Ile Glu Tyr Gln His His Lys Pro Pro Phe Thr Asn Leu
 100 105 110
 His Val Ser Tyr Gln Lys Tyr Phe Lys Leu Glu Pro Leu Gln Ala Tyr
 115 120 125
 His Arg Val Ile Ser Leu Glu Asp Phe Met Glu Lys Leu Ala Pro Thr
 130 135 140
 His Trp Pro Pro Glu Lys Arg Val Ala Tyr Cys Phe Glu Val Ala Ala
 145 150 155 160
 Gln Arg Ser Pro Asp Lys Lys Thr Cys Pro Met Lys Glu Gly Asn Pro
 165 170 175
 Phe Gly Pro Phe Trp Asp Gln Phe His Val Ser Phe Asn Lys Ser Glu
 180 185 190
 Leu Phe Thr Gly Ile Ser Phe Ser Ala Ser Tyr Arg Glu Gln Trp Ser
 195 200 205
 Gln Arg Phe Ser Pro Lys Glu His Pro Val Leu Ala Leu Pro Gly Ala
 210 215 220
 Pro Ala Gln Phe Pro Val Leu Glu Glu His Arg Pro Leu Gln Lys Tyr

225 230 235 240
 Met Val Trp Ser Asp Glu Met Val Lys Thr Gly Glu Ala Gln Ile His
 245 250 255
 Ala His Leu Val Arg Pro Tyr Val Gly Ile His Leu Arg Ile Gly Ser
 260 265 270
 Asp Trp Lys Asn Ala Cys Ala Met Leu Lys Asp Gly Thr Ala Gly Ser
 275 280 285
 His Phe Met Ala Ser Pro Gln Cys Val Gly Tyr Ser Arg Ser Thr Ala
 290 295 300
 Ala Pro Leu Thr Met Thr Met Cys Leu Pro Asp Leu Lys Glu Ile Gln
 305 310 315 320
 Arg Ala Val Lys Leu Trp Val Arg Ser Leu Asp Ala Gln Ser Val Tyr
 325 330 335
 Val Ala Thr Asp Ser Glu Ser Tyr Val Pro Glu Leu Gln Gln Leu Phe
 340 345 350
 Lys Gly Lys Val Lys Val Val Ser Leu Lys Pro Glu Val Ala Gln Val
 355 360 365
 Asp Leu Tyr Ile Leu Gly Gln Ala Asp His Phe Ile Gly Asn Cys Val
 370 375 380
 Ser Ser Phe Thr Ala Phe Val Lys Arg Glu Arg Asp Leu Gln Gly Arg
 385 390 395 400
 Pro Ser Ser Phe Phe Gly Met Asp Arg Pro Pro Lys Leu Arg Asp Glu
 405 410 415
 Phe
 417

<210> 3008
 <211> 412
 <212> PRT
 <213> Homo sapiens

<400> 3008
 Thr Ala Arg Gly Gly Ser Glu Pro Gly Pro Thr Met Ala Ala Asn
 1 5 10 15
 Tyr Ser Ser Thr Ser Thr Arg Arg Glu His Val Lys Val Lys Thr Ser
 20 25 30
 Ser Gln Pro Gly Phe Leu Glu Arg Leu Ser Glu Thr Ser Gly Gly Met
 35 40 45
 Phe Val Gly Leu Met Ala Phe Leu Leu Ser Phe Tyr Leu Ile Phe Thr
 50 55 60
 Asn Glu Gly Arg Ala Leu Lys Thr Ala Thr Ser Leu Ala Glu Gly Leu
 65 70 75 80
 Ser Leu Val Val Ser Pro Asp Ser Ile His Ser Val Ala Pro Glu Asn
 85 90 95
 Glu Gly Arg Leu Val His Ile Ile Gly Ala Leu Arg Thr Ser Lys Leu
 100 105 110
 Leu Ser Asp Pro Asn Tyr Gly Val His Leu Pro Ala Val Lys Leu Arg
 115 120 125
 Arg His Val Glu Met Tyr Gln Trp Val Glu Thr Glu Glu Ser Arg Glu
 130 135 140
 Tyr Thr Glu Asp Gly Gln Val Lys Lys Glu Thr Arg Tyr Ser Tyr Asn
 145 150 155 160
 Thr Glu Trp Arg Ser Glu Ile Ile Asn Ser Lys Asn Phe Asp Arg Glu
 165 170 175
 Ile Gly His Lys Asn Pro Arg Ala Met Ala Gly Glu Ser Phe Met Ala
 180 185 190
 Thr Ala Pro Phe Val Gln Ile Gly Arg Phe Phe Leu Ser Ser Gly Leu
 195 200 205
 Ile Asp Lys Val Asp Asn Phe Lys Ser Leu Ser Leu Ser Lys Leu Glu
 210 215 220
 Asp Pro His Val Asp Ile Ile Arg Arg Gly Asp Phe Phe Tyr His Ser

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225          230          235          240
Glu Asn Pro Lys Tyr Pro Glu Val Gly Asp Leu Arg Val Ser Phe Ser
          245          250          255
Tyr Ala Gly Leu Ser Gly Asp Asp Pro Asp Leu Gly Pro Ala His Val
          260          265          270
Val Thr Val Ile Ala Arg Gln Arg Gly Asp Gln Leu Val Pro Phe Ser
          275          280          285
Thr Lys Ser Gly Asp Thr Leu Leu Leu Leu His His Gly Asp Phe Ser
          290          295          300
Ala Glu Glu Val Phe His Arg Glu Leu Arg Ser Asn Ser Met Lys Thr
          305          310          315          320
Trp Gly Leu Arg Ala Ala Gly Trp Met Ala Met Phe Met Gly Leu Asn
          325          330          335
Leu Met Thr Arg Ile Leu Tyr Thr Leu Val Asp Trp Phe Pro Val Phe
          340          345          350
Arg Asp Leu Val Asn Ile Gly Leu Lys Ala Phe Ala Phe Cys Val Ala
          355          360          365
Thr Ser Leu Thr Leu Leu Thr Val Ala Ala Gly Trp Leu Phe Tyr Arg
          370          375          380
Pro Leu Trp Ala Leu Leu Ile Ala Gly Leu Ala Leu Val Pro Ile Leu
          385          390          395          400
Val Ala Arg Thr Arg Val Pro Ala Lys Lys Leu Glu
          405          410          412

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<210> 3009
 <211> 188
 <212> PRT
 <213> Homo sapiens

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<400> 3009
Asp Ala Ala Val Ala Met Thr Ala Gln Gly Gly Leu Val Ala Asn Arg
  1          5          10          15
Gly Arg Arg Phe Lys Trp Ala Ile Glu Leu Ser Gly Pro Gly Gly Gly
          20          25          30
Ser Arg Gly Arg Ser Asp Arg Gly Ser Gly Gln Gly Asp Ser Leu Tyr
          35          40          45
Pro Val Gly Tyr Leu Asp Lys Gln Val Pro Asp Thr Ser Val Gln Glu
          50          55          60
Thr Asp Arg Ile Leu Val Glu Lys Arg Cys Trp Asp Ile Ala Leu Gly
          65          70          75          80
Pro Leu Lys Gln Ile Pro Met Asn Leu Phe Ile Met Tyr Met Ala Gly
          85          90          95
Asn Thr Ile Ser Ile Phe Pro Thr Met Met Val Cys Met Met Ala Trp
          100          105          110
Arg Pro Ile Gln Ala Leu Met Ala Ile Ser Ala Thr Phe Lys Met Leu
          115          120          125
Glu Ser Ser Ser Gln Lys Phe Leu Gln Gly Leu Val Tyr Leu Ile Gly
          130          135          140
Asn Leu Met Gly Leu Ala Leu Ala Val Tyr Lys Cys Gln Ser Met Gly
          145          150          155          160
Leu Leu Pro Thr His Ala Ser Asp Trp Leu Ala Phe Ile Glu Pro Pro
          165          170          175
Glu Arg Met Glu Phe Ser Gly Gly Gly Leu Leu Leu
          180          185          188

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<210> 3010
 <211> 346
 <212> PRT
 <213> Homo sapiens

<400> 3010

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Leu Ile Asp Ser Ala Lys Ala Arg Tyr Trp Thr Gln Arg Gly Thr Trp
 1           5           10           15
Val Tyr Asp Asn Ala Leu Leu Leu Leu Lys Cys Leu Trp Ser Asn
          20           25           30
Val Val Pro Glu Cys Thr Met Ala Ser Ser Asn Thr Val Leu Met Arg
          35           40           45
Leu Val Ala Ser Ala Tyr Ser Ile Ala Gln Lys Ala Gly Met Ile Val
          50           55           60
Arg Arg Val Ile Ala Glu Gly Asp Leu Gly Ile Val Glu Lys Thr Cys
          65           70           75           80
Ala Thr Asp Leu Gln Thr Lys Ala Asp Arg Leu Ala Gln Met Ser Ile
          85           90           95
Cys Ser Ser Leu Ala Arg Lys Phe Pro Lys Leu Thr Ile Ile Gly Glu
          100          105          110
Glu Asp Leu Pro Ser Glu Glu Val Asp Gln Glu Leu Ile Glu Asp Ser
          115          120          125
Gln Trp Glu Glu Ile Leu Lys Gln Pro Cys Pro Ser Gln Tyr Ser Ala
          130          135          140
Ile Lys Glu Glu Asp Leu Val Val Trp Val Asp Pro Leu Asp Gly Thr
          145          150          155          160
Lys Glu Tyr Thr Glu Gly Leu Leu Asp Asn Val Thr Val Leu Ile Gly
          165          170          175
Ile Ala Tyr Glu Gly Lys Ala Ile Ala Gly Val Ile Asn Gln Pro Tyr
          180          185          190
Tyr Asn Tyr Glu Ala Gly Pro Asp Ala Val Leu Gly Arg Thr Ile Trp
          195          200          205
Gly Val Leu Gly Leu Gly Ala Phe Gly Phe Gln Leu Lys Glu Val Pro
          210          215          220
Ala Gly Lys His Ile Ile Thr Thr Thr Arg Ser His Ser Asn Lys Leu
          225          230          235          240
Val Thr Asp Cys Val Ala Ala Met Asn Pro Asp Ala Val Leu Arg Val
          245          250          255
Gly Gly Ala Gly Asn Lys Ile Ile Gln Leu Ile Glu Gly Lys Ala Ser
          260          265          270
Ala Tyr Val Phe Ala Ser Pro Gly Cys Lys Lys Trp Asp Thr Cys Ala
          275          280          285
Pro Glu Val Ile Leu His Ala Val Gly Gly Lys Leu Thr Asp Ile His
          290          295          300
Gly Asn Val Leu Gln Tyr His Lys Asp Val Lys His Met Asn Ser Ala
          305          310          315          320
Gly Val Leu Ala Thr Leu Arg Asn Tyr Asp Tyr Tyr Ala Ser Arg Val
          325          330          335
Pro Glu Ser Ile Lys Asn Ala Leu Val Pro
          340          345 346

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<210> 3011

<211> 386

<212> PRT

<213> Homo sapiens

<400> 3011

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Ser Pro Gln Lys Thr Met Arg Ser His Thr Ile Thr Met Thr Thr Thr
 1           5           10           15
Ser Val Ser Ser Trp Pro Tyr Ser Ser His Arg Met Arg Phe Ile Thr
          20           25           30
Asn His Ser Asp Gln Pro Pro Gln Asn Phe Ser Ala Thr Pro Asn Val
          35           40           45
Thr Thr Cys Pro Met Asp Glu Lys Leu Leu Ser Thr Val Leu Thr Thr

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<210> 3012
<211> 366
<212> PRT
<213> Homo sapiens
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4687

				85					90					95					
Ser	Thr	Arg	Trp	Arg	Lys	Gly	Val	Cys	Glu	Glu	Thr	Ser	Gly	Ala	Tyr				
			100					105						110					
Glu	Lys	Thr	Asp	Thr	Asp	Gly	Lys	Phe	Leu	Tyr	His	Lys	Ser	Lys	Trp				
		115					120							125					
Asn	Ile	Thr	Met	Glu	Ser	Tyr	Val	Val	His	Thr	Asn	Tyr	Asp	Glu	Tyr				
		130					135						140						
Ala	Ile	Phe	Leu	Thr	Lys	Lys	Phe	Ser	Arg	His	His	Gly	Pro	Thr	Ile				
		145				150				155					160				
Thr	Ala	Lys	Leu	Tyr	Gly	Arg	Ala	Pro	Gln	Leu	Arg	Glu	Thr	Leu	Leu				
			165						170					175					
Gln	Asp	Phe	Arg	Val	Val	Ala	Gln	Gly	Val	Gly	Ile	Pro	Glu	Asp	Ser				
		180						185					190						
Ile	Phe	Thr	Met	Ala	Asp	Arg	Gly	Glu	Cys	Val	Pro	Gly	Glu	Gln	Glu				
		195					200						205						
Pro	Glu	Pro	Ile	Leu	Ile	Pro	Arg	Val	Arg	Arg	Ala	Val	Leu	Pro	Gln				
		210				215					220								
Glu	Glu	Glu	Gly	Ser	Gly	Gly	Gly	Gln	Leu	Val	Thr	Glu	Val	Thr	Lys				
		225			230					235				240					
Lys	Glu	Asp	Ser	Cys	Gln	Leu	Gly	Tyr	Ser	Ala	Gly	Pro	Cys	Met	Gly				
			245					250					255						
Met	Thr	Ser	Arg	Tyr	Phe	Tyr	Asn	Gly	Thr	Ser	Met	Ala	Cys	Glu	Thr				
		260					265					270							
Phe	Gln	Tyr	Gly	Gly	Cys	Met	Gly	Asn	Gly	Asn	Asn	Phe	Val	Thr	Glu				
		275					280					285							
Lys	Glu	Cys	Leu	Gln	Thr	Cys	Arg	Thr	Val	Ala	Ala	Cys	Asn	Leu	Pro				
		290				295					300								
Ile	Val	Arg	Gly	Pro	Cys	Arg	Ala	Phe	Ile	Gln	Leu	Trp	Ala	Phe	Asp				
		305			310					315				320					
Ala	Val	Lys	Gly	Lys	Cys	Val	Leu	Phe	Pro	Tyr	Gly	Gly	Cys	Gln	Gly				
			325					330					335						
Asn	Gly	Asn	Lys	Phe	Tyr	Ser	Glu	Lys	Glu	Cys	Arg	Glu	Tyr	Cys	Gly				
		340					345						350						
Val	Pro	Gly	Asp	Gly	Asp	Glu	Glu	Leu	Leu	Arg	Phe	Ser	Asn						
		355				360						365	366						

<210> 3013
 <211> 104
 <212> PRT
 <213> Homo sapiens

Arg	Gln	Met	Ala	Leu	Leu	Lys	Ala	Asn	Lys	Asp	Leu	Ile	Ser	Ala	Gly				
	1			5					10					15					
Leu	Lys	Glu	Phe	Ser	Val	Leu	Leu	Asn	Gln	Gln	Val	Phe	Asn	Asp	Pro				
		20						25					30						
Leu	Val	Ser	Glu	Glu	Asp	Met	Val	Thr	Val	Val	Glu	Asp	Trp	Met	Asn				
		35				40						45							
Phe	Tyr	Ile	Asn	Tyr	Tyr	Arg	Gln	Gln	Val	Thr	Gly	Glu	Pro	Gln	Glu				
	50					55					60								
Arg	Asp	Lys	Ala	Leu	Gln	Glu	Leu	Arg	Gln	Glu	Leu	Asn	Thr	Leu	Ala				
	65				70					75				80					
Asn	Pro	Phe	Leu	Ala	Lys	Tyr	Arg	Asp	Phe	Leu	Lys	Ser	His	Glu	Leu				
			85					90						95					
Pro	Ser	His	Pro	Pro	Pro	Ser	Ser												
			100				104												

<210> 3014
 <211> 124

<212> PRT

<213> Homo sapiens

<400> 3014

Gly Thr Ser Trp Ser Thr Leu Arg Ala Val Met Ser Ala Ser Val Val
 1 5 10 15
 Ser Val Val Ser Arg Val Leu Glu Glu Tyr Leu Ser Ser Thr Pro Gln
 20 25 30
 Arg Leu Lys Leu Leu Asp Ala Tyr Leu Leu Tyr Ile Leu Leu Thr Gly
 35 40 45
 Ala Leu Gln Phe Gly Tyr Cys Leu Phe Val Leu Thr Phe His Phe Asn
 50 55 60
 Ser Leu Leu Leu Phe Phe Phe Cys Val Gly Ser Phe His Ser Asn
 65 70 75 80
 Val Tyr Phe Leu Leu Phe Thr Leu Ser Phe Leu Cys Phe Leu Phe Ile
 85 90 95
 Ala Tyr Phe Phe Leu Ile Arg Phe Phe Ser Leu Phe Ile Trp Phe Phe
 100 105 110
 His Val Phe Phe Ile Glu Leu Ser Leu Phe Tyr Phe
 115 120 124

<210> 3015

<211> 439

<212> PRT

<213> Homo sapiens

<400> 3015

Ala Ala Ala Glu Gly Thr Ala Pro Ser Pro Gly Arg Val Ser Pro Pro
 1 5 10 15
 Thr Pro Ala Arg Gly Glu Pro Glu Val Thr Val Glu Ile Gly Glu Thr
 20 25 30
 Tyr Leu Cys Arg Arg Pro Asp Ser Thr Trp His Ser Ala Glu Val Ile
 35 40 45
 Gln Ser Arg Val Asn Asp Gln Glu Gly Arg Glu Glu Phe Tyr Val His
 50 55 60
 Tyr Val Gly Phe Asn Arg Arg Leu Asp Glu Trp Val Asp Lys Asn Arg
 65 70 75 80
 Leu Ala Leu Thr Lys Thr Val Lys Asp Ala Val Gln Lys Asn Ser Glu
 85 90 95
 Lys Tyr Leu Ser Glu Leu Ala Glu Gln Pro Glu Arg Lys Ile Thr Arg
 100 105 110
 Asn Gln Lys Arg Lys His Asp Glu Ile Asn His Val Gln Lys Thr Tyr
 115 120 125
 Ala Glu Met Asp Pro Thr Thr Ala Ala Leu Glu Lys Glu His Glu Ala
 130 135 140
 Ile Thr Lys Val Lys Tyr Val Asp Lys Ile His Ile Gly Asn Tyr Glu
 145 150 155 160
 Ile Asp Ala Trp Tyr Phe Ser Pro Phe Pro Glu Asp Tyr Gly Lys Gln
 165 170 175
 Pro Lys Leu Trp Leu Cys Glu Tyr Cys Leu Lys Tyr Met Lys Tyr Glu
 180 185 190
 Lys Ser Tyr Arg Phe His Leu Gly Gln Cys Gln Trp Arg Gln Pro Pro
 195 200 205
 Gly Lys Glu Ile Tyr Arg Lys Ser Asn Ile Ser Val Tyr Glu Val Asp
 210 215 220
 Gly Lys Asp His Lys Ile Tyr Cys Gln Asn Leu Cys Leu Leu Ala Lys
 225 230 235 240
 Leu Phe Leu Asp His Lys Thr Leu Tyr Phe Asp Val Glu Pro Phe Val
 245 250 255
 Phe Tyr Ile Leu Thr Glu Val Asp Arg Gln Gly Ala His Ile Val Gly


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<210> 3016
<211> 439
<212> PRT
<213> Homo sapiens
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4690

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<210> 3017
<211> 222
<212> PRT
<213> Homo sapiens
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4691

<210> 3018
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 3018
 Ala Pro Val Leu Ile Leu Gln Met Val Lys Leu Ser Ile Val Leu Thr
 1 5 10 15
 Pro Gln Phe Leu Ser His Asp Gln Gly Gln Leu Thr Lys Glu Leu Gln
 20 25 30
 Gln His Val Lys Ser Val Thr Cys Pro Cys Glu Tyr Leu Arg Lys Val
 35 40 45
 Ser Glu Cys Arg Gln Met Gly Pro Gly Ala Leu Glu Gln Phe Pro Gly
 50 55 60
 Leu Ser Cys His Thr Ser His Ser Gly
 65 70 73

<210> 3019
 <211> 198
 <212> PRT
 <213> Homo sapiens

<400> 3019
 Pro Gly Ile Thr Met Ala Ala Ser Leu Val Gly Lys Lys Ile Val Phe
 1 5 10 15
 Val Thr Gly Asn Ala Lys Lys Leu Glu Glu Val Val Gln Ile Leu Gly
 20 25 30
 Asp Lys Phe Pro Cys Thr Leu Val Ala Gln Lys Ile Asp Leu Pro Glu
 35 40 45
 Tyr Gln Gly Glu Pro Asp Glu Ile Ser Ile Gln Lys Cys Gln Glu Ala
 50 55 60
 Val Arg Gln Val Gln Gly Pro Val Leu Val Glu Asp Thr Cys Leu Cys
 65 70 75 80
 Phe Asn Ala Leu Gly Gly Leu Pro Gly Pro Tyr Ile Lys Trp Phe Leu
 85 90 95
 Glu Lys Leu Lys Pro Glu Gly Leu His Gln Leu Leu Ala Gly Phe Glu
 100 105 110
 Asp Lys Ser Ala Tyr Ala Leu Cys Thr Phe Ala Leu Ser Thr Gly Asp
 115 120 125
 Pro Ser Gln Pro Val Arg Leu Phe Arg Gly Arg Thr Ser Gly Arg Ile
 130 135 140
 Val Ala Pro Arg Gly Cys Gln Asp Phe Gly Trp Asp Pro Cys Phe Gln
 145 150 155 160
 Pro Asp Gly Tyr Glu Gln Thr Tyr Ala Glu Met Pro Lys Ala Glu Lys
 165 170 175
 Asn Ala Val Ser His Arg Phe Arg Ala Leu Leu Glu Leu Gln Glu Tyr
 180 185 190
 Phe Gly Ser Leu Ala Ala
 195 198

<210> 3020
 <211> 340
 <212> PRT
 <213> Homo sapiens

<400> 3020

```

Val Ser Cys Leu Pro Thr Ser Cys Lys Met Ile Thr Leu Asn Asn Gln
 1          5          10          15
Asp Gln Pro Val Pro Phe Asn Ser Ser His Pro Asp Glu Tyr Lys Ile
          20          25          30
Ala Ala Leu Val Phe Tyr Ser Cys Ile Phe Ile Ile Gly Leu Phe Val
          35          40          45
Asn Ile Thr Ala Leu Trp Val Phe Ser Cys Thr Thr Lys Lys Arg Thr
          50          55          60
Thr Val Thr Ile Tyr Met Met Asn Val Ala Leu Val Asp Leu Ile Phe
          65          70          75          80
Ile Met Thr Leu Pro Phe Arg Met Phe Tyr Tyr Ala Lys Asp Glu Trp
          85          90          95
Pro Phe Gly Glu Tyr Phe Cys Gln Ile Leu Gly Ala Leu Thr Val Phe
          100          105          110
Tyr Pro Ser Ile Ala Leu Trp Leu Leu Ala Phe Ile Ser Ala Asp Arg
          115          120          125
Tyr Met Ala Ile Val Gln Pro Lys Tyr Ala Lys Glu Leu Lys Asn Thr
          130          135          140
Cys Lys Ala Val Leu Ala Cys Val Gly Val Trp Ile Met Thr Leu Thr
          145          150          155          160
Thr Thr Thr Pro Leu Leu Leu Tyr Lys Asp Pro Asp Lys Asp Ser
          165          170          175
Thr Pro Ala Thr Cys Leu Lys Ile Ser Asp Ile Ile Tyr Leu Lys Ala
          180          185          190
Val Asn Val Leu Asn Leu Thr Arg Leu Thr Phe Phe Phe Leu Ile Pro
          195          200          205
Leu Phe Ile Met Ile Gly Cys Tyr Leu Val Ile Ile His Asn Leu Leu
          210          215          220
His Gly Arg Thr Ser Lys Leu Lys Pro Lys Val Lys Glu Lys Ser Ile
          225          230          235          240
Arg Ile Ile Ile Thr Leu Leu Val Gln Val Leu Val Cys Phe Met Pro
          245          250          255
Phe His Ile Cys Phe Ala Phe Leu Met Leu Gly Thr Gly Glu Asn Ser
          260          265          270
Tyr Asn Pro Trp Gly Ala Phe Thr Thr Phe Leu Met Asn Leu Ser Thr
          275          280          285
Cys Leu Asp Val Ile Leu Tyr Tyr Ile Val Ser Lys Gln Phe Gln Ala
          290          295          300
Arg Val Ile Ser Val Met Leu Tyr Arg Asn Tyr Leu Arg Ser Met Arg
          305          310          315          320
Arg Lys Ser Phe Arg Ser Gly Ser Leu Arg Ser Leu Ser Asn Ile Asn
          325          330          335
Ser Glu Met Leu
          340

```

<210> 3021

<211> 623

<212> PRT

<213> Homo sapiens

<400> 3021

```

Glu Glu Phe Cys Thr Trp Ile Ala Val Arg Val Gly Glu Met Glu Thr
 1          5          10          15
Ala Pro Lys Pro Gly Lys Asp Val Pro Pro Lys Lys Asp Lys Leu Gln
          20          25          30
Thr Lys Arg Lys Lys Pro Arg Arg Tyr Trp Glu Glu Glu Thr Val Pro
          35          40          45
Thr Thr Ala Gly Ala Ser Pro Gly Pro Pro Arg Asn Lys Lys Asn Arg
          50          55          60
Glu Leu Arg Pro Gln Arg Pro Lys Asn Ala Tyr Ile Leu Lys Lys Ser

```

65						70						75						80
Arg	Ile	Ser	Lys	Lys	Pro	Gln	Val	Pro	Lys	Lys	Pro	Arg	Glu	Trp	Lys			
				85						90				95				
Asn	Pro	Glu	Ser	Gln	Arg	Gly	Leu	Ser	Gly	Ala	Gln	Asp	Pro	Phe	Pro			
			100					105					110					
Gly	Pro	Ala	Pro	Val	Pro	Val	Glu	Val	Val	Gln	Lys	Phe	Cys	Arg	Ile			
			115				120					125						
Asp	Lys	Ser	Arg	Lys	Leu	Pro	His	Ser	Lys	Ala	Lys	Thr	Arg	Ser	Arg			
	130				135						140							
Leu	Glu	Val	Ala	Glu	Ala	Glu	Glu	Glu	Glu	Thr	Ser	Ile	Lys	Ala	Ala			
	145				150					155				160				
Arg	Ser	Glu	Leu	Leu	Leu	Ala	Glu	Glu	Pro	Gly	Phe	Leu	Glu	Gly	Glu			
				165					170					175				
Asp	Gly	Glu	Asp	Thr	Ala	Lys	Ile	Cys	Gln	Ala	Asp	Ile	Val	Glu	Ala			
			180					185					190					
Val	Asp	Ile	Ala	Ser	Ala	Ala	Lys	His	Phe	Asp	Leu	Asn	Leu	Arg	Gln			
	195						200					205						
Phe	Gly	Pro	Tyr	Arg	Leu	Asn	Tyr	Ser	Arg	Thr	Gly	Arg	His	Leu	Ala			
	210					215					220							
Phe	Gly	Gly	Arg	Arg	Gly	His	Val	Ala	Ala	Leu	Asp	Trp	Val	Thr	Lys			
	225				230					235				240				
Lys	Leu	Met	Cys	Glu	Ile	Asn	Val	Met	Glu	Ala	Val	Arg	Asp	Ile	Arg			
				245					250					255				
Phe	Leu	His	Ser	Glu	Ala	Leu	Leu	Ala	Val	Ala	Gln	Asn	Arg	Trp	Leu			
			260					265						270				
His	Ile	Tyr	Asp	Asn	Gln	Gly	Ile	Glu	Leu	His	Cys	Ile	Arg	Arg	Cys			
	275					280						285						
Asp	Arg	Val	Thr	Arg	Leu	Glu	Phe	Leu	Pro	Phe	His	Phe	Leu	Leu	Ala			
	290					295						300						
Thr	Ala	Ser	Glu	Thr	Gly	Phe	Leu	Thr	Tyr	Leu	Asp	Val	Ser	Val	Gly			
	305				310					315				320				
Lys	Ile	Val	Ala	Ala	Leu	Asn	Ala	Arg	Ala	Gly	Arg	Leu	Asp	Val	Met			
				325					330					335				
Ser	Gln	Asn	Pro	Tyr	Asn	Ala	Val	Ile	His	Leu	Gly	His	Ser	Asn	Gly			
			340					345					350					
Thr	Val	Ser	Leu	Trp	Ser	Pro	Ala	Met	Lys	Glu	Pro	Leu	Ala	Lys	Ile			
	355						360					365						
Leu	Cys	His	Arg	Gly	Gly	Val	Arg	Ala	Val	Ala	Val	Asp	Ser	Thr	Gly			
	370					375						380						
Thr	Tyr	Met	Ala	Thr	Ser	Gly	Leu	Asp	His	Gln	Leu	Lys	Ile	Phe	Asp			
	385				390					395				400				
Leu	Arg	Gly	Thr	Tyr	Gln	Pro	Leu	Ser	Thr	Arg	Thr	Leu	Pro	His	Gly			
				405					410					415				
Ala	Gly	His	Leu	Ala	Phe	Ser	Gln	Arg	Gly	Leu	Leu	Val	Ala	Gly	Met			
			420					425					430					
Gly	Asp	Val	Val	Asn	Ile	Trp	Ala	Gly	Gln	Gly	Lys	Ala	Ser	Pro	Pro			
	435						440					445						
Ser	Leu	Glu	Gln	Pro	Tyr	Leu	Thr	His	Arg	Leu	Ser	Gly	Pro	Val	His			
	450					455						460						
Gly	Leu	Gln	Phe	Cys	Pro	Phe	Glu	Asp	Val	Leu	Gly	Val	Gly	His	Thr			
	465				470					475				480				
Gly	Gly	Ile	Thr	Ser	Met	Leu	Val	Pro	Gly	Ala	Gly	Glu	Pro	Asn	Phe			
				485					490					495				
Asp	Gly	Leu	Glu	Ser	Asn	Pro	Tyr	Arg	Ser	Arg	Lys	Gln	Arg	Gln	Glu			
			500					505					510					
Trp	Glu	Val	Lys	Ala	Leu	Leu	Glu	Lys	Val	Pro	Ala	Glu	Leu	Ile	Cys			
			515				520						525					
Leu	Asp	Pro	Arg	Ala	Leu	Ala	Glu	Val	Asp	Val	Ile	Ser	Leu	Glu	Gln			
	530					535					540							
Gly	Lys	Lys	Glu	Gln	Ile	Glu	Arg	Leu	Gly	Tyr	Asp	Pro	Gln	Ala	Lys			
	545				550					555				560				
Ala	Pro	Phe	Gln	Pro	Lys	Pro	Lys	Gln	Lys	Gly	Arg	Ser	Ser	Thr	Ala			
				565					570					575				
Ser	Leu	Val	Lys	Arg	Lys	Arg	Lys	Val	Met	Asp	Glu	Glu	His	Arg	Asp			

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<210> 3022
<211> 749
<212> PRT
<213> Homo sapiens
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4695

385 390 395 400
 Phe Ile His His Gln Arg Arg His Thr Gly Gly Val Arg His Glu Cys
 405 410 415
 Gly Glu Cys Arg Lys Thr Phe Ser Tyr Lys Ser Asn Leu Ile Glu His
 420 425 430
 Gln Arg Val His Thr Gly Glu Arg Pro Tyr Glu Cys Gly Glu Cys Gly
 435 440 445
 Lys Ser Phe Arg Gln Ser Ser Ser Leu Phe Arg His Gln Arg Val His
 450 455 460
 Ser Gly Glu Arg Pro Tyr Gln Cys Cys Glu Cys Gly Lys Ser Phe Arg
 465 470 475 480
 Gln Ile Phe Asn Leu Ile Arg His Arg Arg Val His Thr Gly Glu Met
 485 490 495
 Pro Tyr Gln Cys Ser Asp Cys Gly Lys Ser Phe Ser Cys Lys Ser Glu
 500 505 510
 Leu Ile Gln His Gln Arg Ile His Ser Gly Glu Arg Pro Tyr Glu Cys
 515 520 525
 Arg Glu Cys Gly Lys Ser Phe Arg Gln Phe Ser Asn Leu Ile Arg His
 530 535 540
 Arg Ser Ile His Thr Gly Asp Arg Pro Tyr Glu Cys Ser Glu Cys Glu
 545 550 555 560
 Lys Ser Phe Ser Arg Lys Phe Ile Leu Ile Gln His Gln Arg Val His
 565 570 575
 Thr Gly Glu Arg Pro Tyr Glu Cys Ser Glu Cys Gly Lys Ser Phe Thr
 580 585 590
 Arg Lys Ser Asp Leu Ile Gln His Arg Arg Ile His Thr Gly Thr Arg
 595 600 605
 Pro Tyr Glu Cys Ser Glu Cys Gly Lys Ser Phe Arg Gln Arg Ser Gly
 610 615 620
 Leu Ile Gln His Arg Arg Leu His Thr Gly Glu Arg Pro Tyr Glu Cys
 625 630 635 640
 Ser Glu Cys Gly Lys Ser Phe Ser Gln Ser Ala Ser Leu Ile Gln His
 645 650 655
 Gln Arg Val His Thr Gly Glu Arg Pro Tyr Gln Cys Cys Glu Cys Gly
 660 665 670
 Lys Ser Phe Arg Gln Ile Phe Asn Leu Ile Arg His Arg Arg Val His
 675 680 685
 Thr Gly Glu Met Pro Tyr Gln Cys Ser Asp Cys Gly Lys Ser Phe Ser
 690 695 700
 Cys Lys Ser Glu Leu Ile Gln His Arg Arg Ile His Ser Gly Glu Arg
 705 710 715 720
 Pro Tyr Glu Cys Ser Glu Cys Gly Lys Ser Phe Ser Arg Lys Ser Asn
 725 730 735
 Leu Ile Arg His Arg Arg Val His Thr Glu Glu Arg Pro
 740 745 749

<210> 3023

<211> 838

<212> PRT

<213> Homo sapiens

<400> 3023

Ala Ala Gly Ala Leu Arg Cys Leu Ala Ala Phe Pro Arg Ala Glu Pro
 1 5 10 15
 Ala Ser Arg Gly Arg Gln Ser Ser Pro Ala Arg Ala Cys Ala Ala Ser
 20 25 30
 Arg Ala Glu Arg Ala Thr Ala Ala Met Ala His Arg Cys Leu Arg
 35 40 45
 Leu Trp Gly Arg Gly Gly Cys Trp Pro Arg Gly Leu Gln Gln Leu Leu
 50 55 60
 Val Pro Gly Gly Val Gly Pro Gly Glu Gln Pro Cys Leu Arg Thr Leu

65	70	75	80
Tyr Arg Phe Val Thr Thr Gln Ala Arg Ala Ser Arg Asn Ser Leu Leu			
	85	90	95
Thr Asp Ile Ile Ala Ala Tyr Gln Arg Phe Cys Ser Arg Pro Pro Lys			
	100	105	110
Gly Phe Gly Lys Tyr Phe Pro Asn Gly Lys Asn Gly Lys Lys Ala Ser			
	115	120	125
Glu Pro Lys Glu Val Met Gly Glu Lys Lys Glu Ser Lys Pro Ala Ala			
	130	135	140
Thr Thr Arg Ser Ser Gly Gly Gly Gly Gly Gly Gly Lys Arg Gly			
	145	150	155
Gly Lys Lys Asp Asp Ser His Trp Trp Ser Arg Phe Gln Lys Gly Asp			
	165	170	175
Ile Pro Trp Asp Asp Lys Asp Phe Arg Met Phe Phe Leu Trp Thr Ala			
	180	185	190
Leu Phe Trp Gly Gly Val Met Phe Tyr Leu Leu Leu Lys Arg Ser Gly			
	195	200	205
Arg Glu Ile Thr Trp Lys Asp Phe Val Asn Asn Tyr Leu Ser Lys Gly			
	210	215	220
Val Val Asp Arg Leu Glu Val Val Asn Lys Arg Phe Val Arg Val Thr			
	225	230	235
Phe Thr Pro Gly Lys Thr Pro Val Asp Gly Gln Tyr Val Trp Phe Asn			
	245	250	255
Ile Gly Ser Val Asp Thr Phe Glu Arg Asn Leu Glu Thr Leu Gln Gln			
	260	265	270
Glu Leu Gly Ile Glu Gly Glu Asn Arg Val Pro Val Val Tyr Ile Ala			
	275	280	285
Glu Ser Asp Gly Ser Phe Leu Leu Ser Met Leu Pro Thr Val Leu Ile			
	290	295	300
Ile Ala Phe Leu Leu Tyr Thr Ile Arg Arg Gly Pro Ala Ala Ile Gly			
	305	310	315
Arg Thr Gly Arg Gly Met Gly Gly Leu Phe Ser Val Gly Glu Thr Thr			
	325	330	335
Ala Lys Val Leu Lys Asp Glu Ile Asp Val Lys Phe Lys Asp Val Ala			
	340	345	350
Gly Cys Glu Glu Ala Lys Leu Glu Ile Met Glu Phe Val Asn Phe Leu			
	355	360	365
Lys Asn Pro Lys Gln Tyr Gln Asp Leu Gly Ala Lys Ile Pro Lys Gly			
	370	375	380
Ala Ile Leu Thr Gly Pro Pro Gly Thr Gly Lys Thr Leu Leu Ala Lys			
	385	390	395
Ala Thr Ala Gly Glu Ala Asn Val Pro Phe Ile Thr Val Ser Gly Ser			
	405	410	415
Glu Phe Leu Glu Met Phe Val Gly Val Gly Pro Ala Arg Val Arg Asp			
	420	425	430
Leu Phe Ala Leu Ala Arg Lys Asn Ala Pro Cys Ile Leu Phe Ile Asp			
	435	440	445
Glu Ile Asp Ala Val Gly Arg Lys Arg Gly Arg Gly Asn Phe Gly Gly			
	450	455	460
Gln Ser Glu Gln Glu Asn Thr Leu Asn Gln Leu Leu Val Glu Met Asp			
	465	470	475
Gly Phe Asn Thr Thr Thr Asn Val Val Ile Leu Ala Gly Thr Asn Arg			
	485	490	495
Pro Asp Ile Leu Asp Pro Ala Leu Leu Arg Pro Gly Arg Phe Asp Arg			
	500	505	510
Gln Ile Phe Ile Gly Pro Pro Asp Ile Lys Gly Arg Ala Ser Ile Phe			
	515	520	525
Lys Val His Leu Arg Pro Leu Lys Leu Asp Ser Thr Leu Glu Lys Asp			
	530	535	540
Lys Leu Ala Arg Lys Leu Ala Ser Leu Thr Pro Gly Phe Ser Gly Ala			
	545	550	555
Asp Val Ala Asn Val Cys Asn Glu Ala Ala Leu Ile Ala Ala Arg His			
	565	570	575
Leu Ser Asp Ser Ile Asn Gln Lys His Phe Glu Gln Ala Ile Glu Arg			

Val	Ile	Gly	Gly	Leu	Glu	Lys	Lys	Thr	Gln	Val	Leu	Gln	Pro	Glu	Glu
		595					600					605			
Lys	Lys	Thr	Val	Ala	Tyr	His	Glu	Ala	Gly	His	Ala	Val	Ala	Gly	Trp
		610				615					620				
Tyr	Leu	Glu	His	Ala	Asp	Pro	Leu	Leu	Lys	Val	Ser	Ile	Ile	Pro	Arg
		625			630					635					640
Gly	Lys	Gly	Leu	Gly	Tyr	Ala	Gln	Tyr	Leu	Pro	Lys	Glu	Gln	Tyr	Leu
				645					650					655	
Tyr	Thr	Lys	Glu	Gln	Leu	Leu	Asp	Arg	Met	Cys	Met	Thr	Leu	Gly	Gly
			660					665					670		
Arg	Val	Ser	Glu	Glu	Ile	Phe	Phe	Gly	Arg	Ile	Thr	Thr	Gly	Ala	Gln
		675					680					685			
Asp	Asp	Leu	Arg	Lys	Val	Thr	Gln	Ser	Ala	Tyr	Ala	Gln	Ile	Val	Gln
		690				695					700				
Phe	Gly	Met	Asn	Glu	Lys	Val	Gly	Gln	Ile	Ser	Phe	Asp	Leu	Pro	Arg
		705			710					715					720
Gln	Gly	Asp	Met	Val	Leu	Glu	Lys	Pro	Tyr	Ser	Glu	Ala	Thr	Ala	Arg
				725					730					735	
Leu	Ile	Asp	Asp	Glu	Val	Arg	Ile	Leu	Ile	Asn	Asp	Ala	Tyr	Lys	Arg
			740					745					750		
Thr	Val	Ala	Leu	Leu	Thr	Glu	Lys	Lys	Ala	Asp	Val	Glu	Lys	Val	Ala
		755					760					765			
Leu	Leu	Leu	Leu	Glu	Lys	Glu	Val	Leu	Asp	Lys	Asn	Asp	Met	Val	Glu
		770				775					780				
Leu	Leu	Gly	Pro	Arg	Pro	Phe	Ala	Glu	Lys	Ser	Thr	Tyr	Glu	Glu	Phe
		785			790					795					800
Val	Glu	Gly	Thr	Gly	Ser	Leu	Asp	Glu	Asp	Thr	Ser	Leu	Pro	Glu	Gly
				805					810					815	
Leu	Lys	Asp	Trp	Asn	Lys	Glu	Arg	Glu	Lys	Glu	Lys	Glu	Glu	Pro	Pro
			820					825					830		
Gly	Glu	Lys	Val	Ala	Asn										
		835			838										

<210> 3024

<211> 394

<212> PRT

<213> Homo sapiens

<400> 3024

Leu	Arg	Ala	Cys	Ser	Leu	Pro	Ser	Met	Ser	Ala	Leu	Glu	Lys	Ser	Met
1				5					10					15	
His	Leu	Gly	Arg	Leu	Pro	Ser	Arg	Pro	Pro	Leu	Pro	Gly	Ser	Gly	Gly
			20					25					30		
Ser	Gln	Ser	Gly	Ala	Lys	Met	Arg	Met	Gly	Pro	Gly	Arg	Lys	Arg	Asp
		35					40					45			
Phe	Ser	Pro	Val	Pro	Trp	Ser	Gln	Tyr	Phe	Glu	Ser	Met	Glu	Asp	Val
		50				55				60					
Glu	Val	Glu	Asn	Glu	Thr	Gly	Lys	Asp	Thr	Phe	Arg	Val	Tyr	Lys	Ser
		65			70					75					80
Gly	Ser	Glu	Gly	Pro	Val	Leu	Leu	Leu	Leu	His	Gly	Gly	Gly	His	Ser
				85					90					95	
Ala	Leu	Ser	Trp	Ala	Val	Phe	Thr	Ala	Ala	Ile	Ile	Ser	Arg	Val	Gln
			100					105					110		
Cys	Arg	Ile	Val	Ala	Leu	Asp	Leu	Arg	Ser	His	Gly	Glu	Thr	Lys	Val
		115					120					125			
Lys	Asn	Pro	Glu	Asp	Leu	Ser	Ala	Glu	Thr	Met	Ala	Lys	Asp	Val	Gly
		130					135				140				
Asn	Val	Val	Glu	Ala	Met	Tyr	Gly	Asp	Leu	Pro	Pro	Pro	Ile	Met	Leu
		145			150					155					160
Ile	Gly	His	Ser	Met	Gly	Gly	Ala	Ile	Ala	Val	His	Thr	Ala	Ser	Ser

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<210> 3025
<211> 104
<212> PRT
<213> Homo sapiens
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<210> 3026
<211> 360
<212> PRT
<213> Homo sapiens
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4699

```

      1           5           10           15
Glu Ala Arg Ser Pro Ala Ile Asn Leu Met Gly Phe Asn Val Glu Glu
      20           25           30
Met Tyr Glu Ala His Ala Trp Ile Gln Arg Ile Leu Ser Leu Gln Asn
      35           40           45
His His Ile Ile Glu Asn Asn His Ile Leu Tyr Leu Gly Arg Lys Glu
      50           55           60
His Asp Ile Leu Ser Gln Leu Gln Lys Thr Ser Ser Val Ser Ile Thr
      65           70           75           80
Glu Ile Ile Ser Pro Gly Arg Thr Glu Leu Glu Ile Glu Gly Ala Arg
      85           90           95
Ala Asp Leu Ile Glu Val Val Met Asn Ile Glu Asp Met Leu Cys Lys
      100          105          110
Val Gln Glu Glu Met Ala Arg Lys Lys Glu Arg Gly Leu Trp Arg Ser
      115          120          125
Leu Gly Gln Trp Thr Ile Gln Gln Lys Thr Gln Asp Glu Met Lys
      130          135          140
Glu Asn Ile Ile Phe Leu Lys Cys Pro Val Pro Pro Thr Gln Glu Leu
      145          150          155          160
Leu Asp Gln Lys Lys Gln Phe Glu Lys Cys Gly Leu Gln Val Leu Lys
      165          170          175
Val Glu Lys Ile Asp Asn Glu Val Leu Met Ala Ala Phe Gln Arg Lys
      180          185          190
Lys Lys Met Met Glu Glu Lys Leu His Arg Gln Pro Val Ser His Arg
      195          200          205
Leu Phe Gln Gln Val Pro Tyr Gln Phe Cys Asn Val Val Cys Arg Val
      210          215          220
Gly Phe Gln Arg Met Tyr Ser Thr Pro Cys Asp Pro Lys Tyr Gly Ala
      225          230          235          240
Gly Ile Tyr Phe Thr Lys Asn Leu Lys Asn Leu Ala Glu Lys Ala Lys
      245          250          255
Lys Ile Ser Ala Ala Asp Lys Leu Ile Tyr Val Phe Glu Ala Glu Val
      260          265          270
Leu Thr Gly Phe Phe Cys Gln Gly His Pro Leu Asn Ile Val Pro Pro
      275          280          285
Pro Leu Ser Pro Gly Ala Ile Asp Gly His Asp Ser Val Val Asp Asn
      290          295          300
Val Ser Ser Pro Glu Thr Phe Val Ile Phe Ser Gly Met Gln Ala Ile
      305          310          315          320
Pro Gln Tyr Leu Trp Thr Cys Thr Gln Glu Tyr Val Gln Ser Gln Asp
      325          330          335
Tyr Ser Ser Gly Pro Met Arg Pro Phe Ala Gln His Pro Trp Arg Gly
      340          345          350
Phe Ala Ser Gly Ser Pro Val Asp
      355          360

```

<210> 3027

<211> 174

<212> PRT

<213> Homo sapiens

<400> 3027

```

Pro Phe His Leu Gly Ala Ser Ser Asn Thr Phe Arg Leu Gln Val Gln
      1           5           10           15
Thr Gln Glu Ser Lys Ala Gln Lys Glu Val Lys Met Gly Phe Ile Phe
      20           25           30
Ser Lys Ser Met Asn Glu Ser Met Lys Asn Gln Lys Glu Phe Met Leu
      35           40           45
Met Asn Ala Arg Leu Gln Leu Glu Arg Gln Leu Ile Met Gln Ser Glu
      50           55           60
Met Arg Glu Arg Gln Met Ala Met Gln Ile Ala Trp Ser Arg Glu Phe

```

65					70					75				80	
Leu	Lys	Tyr	Phe	Gly	Thr	Phe	Phe	Gly	Leu	Ala	Ala	Ile	Ser	Leu	Thr
				85					90					95	
Ala	Gly	Ala	Ile	Lys	Lys	Lys	Lys	Pro	Ala	Phe	Leu	Val	Pro	Ile	Val
			100					105					110		
Pro	Leu	Ser	Phe	Ile	Leu	Thr	Tyr	Gln	Tyr	Asp	Leu	Gly	Tyr	Gly	Thr
		115					120					125			
Leu	Leu	Glu	Arg	Met	Lys	Gly	Glu	Ala	Glu	Asp	Ile	Leu	Glu	Thr	Glu
	130					135					140				
Lys	Ser	Lys	Leu	Gln	Leu	Pro	Arg	Gly	Met	Ile	Thr	Phe	Glu	Ser	Ile
	145				150					155				160	
Glu	Lys	Ala	Arg	Lys	Glu	Gln	Ser	Arg	Phe	Phe	Ile	Asp	Lys		
				165					170				174		

<210> 3028
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 3028

Ala	Val	Gly	Lys	Glu	Pro	Glu	Ser	Ser	Ser	Thr	Trp	Val	Arg	Asp	Arg
1				5					10					15	
Glu	Gly	His	Ile	Arg	Ser	Arg	Arg	Ser	Met	Lys	Met	Leu	Trp	Lys	Leu
		20						25				30			
Thr	Asp	Asn	Ile	Lys	Tyr	Glu	Asp	Cys	Glu	Val	Ser	Ala	Thr	Pro	Ala
		35					40					45			
Arg	Ser	Ser	Val	Arg	Ser	Gln	Ala	Pro	Ser	Leu	Thr	Leu	Pro	Leu	Leu
	50					55				60					
Leu	Leu	Ser	Leu	Gln	Pro	Ala	Ala	Lys	Arg	Gly	Trp	Asp	Lys	Leu	Ser
	65			70					75					80	
Pro	Ala	Gln	Arg	Pro	Ser	Leu	Gly	Phe	Ala	Arg	Arg	Thr	Arg	Gly	Arg
			85					90					95		
Ser	Cys	Arg	Glu	Arg	Thr	Trp	Met	Leu	Pro	Ser	Leu	Val	Ser	Glu	Phe
			100				105						110		
Leu	His	Arg	Asp												
		115	116												

<210> 3029
 <211> 575
 <212> PRT
 <213> Homo sapiens

<400> 3029

Phe	Arg	Glu	Gly	Arg	Phe	Gly	Ser	Ser	Cys	Ala	Val	Ala	Ala	Pro	Leu
1				5					10					15	
Ala	Gly	Phe	Gln	Gly	Leu	Ile	Glu	Cys	Gly	Tyr	Leu	Ala	Val	Asp	Ser
		20						25				30			
Pro	Pro	Ser	Cys	Trp	Thr	Pro	Gly	Gly	Ser	Asn	Pro	Ala	Ala	Pro	Leu
		35					40					45			
Pro	Gln	Ala	Leu	Leu	Pro	Pro	Arg	Leu	Pro	Pro	Thr	Val	Leu	Pro	Phe
	50					55					60				
Leu	Gly	Pro	Gly	Leu	Ser	Gly	Glu	Leu	Glu	Met	Phe	Thr	Leu	Pro	Gln
	65			70					75					80	
Lys	Asp	Phe	Arg	Ala	Pro	Thr	Thr	Cys	Leu	Gly	Pro	Thr	Cys	Met	Gln
			85					90					95		
Asp	Leu	Gly	Ser	Ser	His	Gly	Glu	Asp	Leu	Glu	Gly	Glu	Cys	Ser	Arg
			100				105					110			
Lys	Leu	Asp	Gln	Lys	Leu	Pro	Glu	Leu	Arg	Gly	Val	Gly	Asp	Pro	Ala

115	120	125
Met Ile Ser Ser Asn Thr Ser Tyr Leu Ser Ser Arg Gly Arg Met Ile		
130	135	140
Lys Trp Phe Trp Asp Ser Ala Glu Glu Gly Tyr Arg Thr Tyr His Met		
145	150	155
Asp Glu Tyr Asp Glu Asp Lys Asn Pro Ser Gly Ile Ile Asn Leu Gly		
	165	170
Thr Ser Glu Asn Lys Leu Cys Phe Asp Leu Leu Ser Trp Arg Leu Ser		
	180	185
Gln Arg Asp Met Gln Arg Val Glu Pro Ser Leu Leu Gln Tyr Ala Asp		
	195	200
Trp Arg Gly His Leu Phe Leu Arg Glu Glu Val Ala Lys Phe Leu Ser		
	210	215
Phe Tyr Cys Lys Ser Pro Val Pro Leu Arg Pro Glu Asn Val Val Val		
225	230	235
Leu Asn Gly Gly Ala Ser Leu Phe Ser Ala Leu Ala Thr Val Leu Cys		
	245	250
Glu Ala Gly Glu Ala Phe Leu Ile Pro Thr Pro Tyr Tyr Gly Ala Ile		
	260	265
Thr Gln His Val Cys Leu Tyr Gly Asn Ile Arg Leu Ala Tyr Val Tyr		
	275	280
Leu Asp Ser Glu Val Thr Gly Leu Asp Thr Arg Pro Phe Gln Leu Thr		
	290	295
Val Glu Lys Leu Glu Met Ala Leu Arg Glu Ala His Ser Glu Gly Val		
305	310	315
Lys Val Lys Gly Leu Ile Leu Ile Ser Pro Gln Asn Pro Leu Gly Asp		
	325	330
Val Tyr Ser Pro Glu Glu Leu Gln Glu Tyr Leu Val Phe Ala Lys Arg		
	340	345
His Arg Leu His Val Ile Val Asp Glu Val Tyr Met Leu Ser Val Phe		
	355	360
Glu Lys Ser Val Gly Tyr Arg Ser Val Leu Ser Leu Glu Arg Leu Pro		
	370	375
Asp Pro Gln Arg Thr His Val Met Trp Ala Thr Ser Lys Asp Phe Gly		
385	390	395
Met Ser Gly Leu Arg Phe Gly Thr Leu Tyr Thr Glu Asn Gln Asp Val		
	405	410
Ala Thr Ala Val Ala Ser Leu Cys Arg Tyr His Gly Leu Ser Gly Leu		
	420	425
Val Gln Tyr Gln Met Ala Gln Leu Leu Arg Asp Arg Asp Trp Ile Asn		
	435	440
Gln Val Tyr Leu Pro Glu Asn His Ala Arg Leu Lys Ala Ala His Thr		
	450	455
Tyr Val Ser Glu Glu Leu Arg Ala Leu Gly Ile Pro Phe Leu Ser Arg		
465	470	475
Gly Ala Gly Phe Phe Ile Trp Val Asp Leu Arg Lys Tyr Leu Leu Lys		
	485	490
Gly Thr Phe Glu Glu Met Leu Leu Trp Arg Arg Phe Leu Asp Asn		
	500	505
Lys Val Leu Leu Ser Phe Gly Lys Ala Phe Glu Cys Lys Glu Pro Gly		
	515	520
Trp Phe Arg Phe Val Phe Ser Asp Gln Val His Arg Leu Cys Leu Gly		
	530	535
Met Gln Arg Val Gln Gln Val Leu Ala Gly Lys Ser Gln Val Ala Glu		
545	550	555
Asp Pro Arg Pro Ser Gln Ser Gln Glu Pro Ser Asp Gln Arg Arg		
	565	570
		575

<210> 3030

<211> 194

<212> PRT

<213> Homo sapiens

<400> 3030

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Pro Trp Leu Pro Trp Ser Asp Gly Arg Ala Ala Arg Ser Ser Arg Lys
 1           5           10           15
Cys Pro Arg Ser Arg Phe Pro Val Gln Val Gly Lys Met Ala Val Ser
      20           25           30
Thr Val Phe Ser Thr Ser Ser Leu Met Leu Ala Leu Ser Arg His Ser
      35           40           45
Leu Leu Ser Pro Leu Leu Ser Val Thr Ser Phe Arg Arg Phe Tyr Arg
      50           55           60
Gly Asp Ser Pro Thr Asp Ser Gln Lys Asp Met Ile Glu Ile Pro Leu
      65           70           75           80
Pro Pro Trp Gln Glu Arg Thr Asp Glu Ser Ile Glu Thr Lys Arg Ala
      85           90           95
Arg Leu Leu Tyr Glu Ser Arg Lys Arg Gly Met Leu Glu Asn Cys Ile
      100          105          110
Leu Leu Ser Leu Phe Ala Lys Glu His Leu Gln His Met Thr Glu Lys
      115          120          125
Gln Leu Asn Leu Tyr Asp Arg Leu Ile Asn Glu Pro Ser Asn Asp Trp
      130          135          140
Asp Ile Tyr Tyr Trp Ala Thr Glu Ala Lys Pro Ala Pro Glu Ile Phe
      145          150          155          160
Glu Asn Glu Val Met Ala Leu Leu Arg Asp Phe Ala Lys Asn Lys Asn
      165          170          175
Lys Glu Gln Arg Leu Arg Ala Pro Asp Leu Glu Tyr Leu Phe Glu Lys
      180          185          190
Pro Arg
      194

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<210> 3031

<211> 272

<212> PRT

<213> Homo sapiens

<400> 3031

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Ser Leu Trp Pro Trp Ile Leu Met Asp Asp Ser Leu Met Gln Ile Ser
 1           5           10           15
Leu Gln Leu Leu Cys Val Tyr Thr Ala Asn Phe Pro Asn Gly Cys Ser
      20           25           30
Ser Leu Cys Trp Ser Ser Cys Gly Gln His Pro Val Gln Ala Thr His
      35           40           45
Arg Gly Ala Val Ser Asn Ser Leu Met Leu Cys Ile Leu Lys Leu Ala
      50           55           60
Ser Gln Met Pro Leu Glu Asn Thr Thr Val Gln Gln Met Val Phe Met
      65           70           75           80
Leu Leu Ser Asn Leu Ala Leu Ser His Asp Cys Lys Gly Val Ile Gln
      85           90           95
Lys Ser Asn Phe Leu Gln Asn Phe Leu Ser Leu Ala Leu Pro Lys Gly
      100          105          110
Gly Asn Lys His Leu Ser Asn Leu Thr Ile Leu Trp Leu Lys Leu Leu
      115          120          125
Leu Asn Ile Ser Ser Gly Glu Asp Gly Gln Gln Met Ile Leu Arg Leu
      130          135          140
Asp Gly Cys Leu Asp Leu Leu Thr Glu Met Ser Lys Tyr Lys His Lys
      145          150          155          160
Ser Ser Pro Leu Leu Pro Leu Leu Ile Phe His Asn Val Cys Phe Ser
      165          170          175
Pro Ala Asn Lys Pro Lys Ile Leu Ala Asn Glu Lys Val Ile Thr Val
      180          185          190
Leu Ala Ala Cys Leu Glu Ser Glu Asn Gln Asn Ala Gln Arg Ile Gly

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195	200	205
Ala Ala Ala Leu Trp Ala Leu Ile Tyr Asn Tyr Gln Lys Ala Lys Thr		
210	215	220
Ala Leu Lys Ser Pro Ser Val Lys Arg Arg Val Asp Glu Ala Tyr Ser		
225	230	235
Leu Ala Lys Lys Thr Phe Pro Asn Ser Glu Ala Asn Pro Leu Asn Ala		
	245	250
Tyr Tyr Leu Lys Cys Leu Glu Asn Leu Val Gln Leu Leu Asn Ser Ser		
260	265	270
		272

<210> 3032
 <211> 413
 <212> PRT
 <213> Homo sapiens

<400> 3032

Gly Ile Ser Gly Arg Pro Pro Arg Pro Ala Lys Arg Arg Met Gly Lys	
1	5
Asn Pro Val Arg Pro Pro Arg Ala Leu Pro Pro Val Pro Ser Gln Asp	
	20
Asp Ile Pro Leu Ser Arg Pro Lys Lys Lys Lys Pro Arg Thr Lys Asn	
	35
Thr Pro Ala Ser Ala Ser Leu Glu Gly Leu Ala Gln Thr Ala Gly Arg	
	50
Arg Pro Ser Glu Gly Asn Glu Pro Ser Thr Lys Glu Leu Lys Glu His	
	65
Pro Glu Ala Pro Val Gln Arg Arg Gln Lys Lys Thr Arg Leu Pro Leu	
	85
Glu Leu Glu Thr Ser Ser Thr Gln Lys Lys Ser Ser Ser Ser Ser Leu	
	100
Leu Arg Asn Glu Asn Gly Ile Asp Ala Glu Pro Ala Glu Ala Val	
	115
Ile Gln Lys Pro Arg Arg Lys Thr Lys Lys Thr Gln Pro Ala Glu Leu	
	130
Gln Tyr Ala Asn Glu Leu Gly Val Glu Asp Glu Asp Ile Ile Thr Asp	
	145
Glu Gln Thr Thr Val Glu Gln Gln Ser Val Phe Thr Ala Pro Thr Gly	
	165
Ile Ser Gln Pro Val Gly Lys Val Phe Val Glu Lys Ser Arg Arg Phe	
	180
Gln Ala Ala Asp Arg Ser Glu Leu Ile Lys Thr Thr Glu Asn Ile Asp	
	195
Val Ser Met Asp Val Lys Pro Ser Trp Thr Thr Arg Asp Val Ala Leu	
	210
Thr Val His Arg Ala Phe Arg Met Ile Gly Leu Phe Ser His Gly Phe	
	225
Leu Ala Gly Cys Ala Val Trp Asn Ile Val Val Ile Tyr Val Leu Ala	
	245
Gly Asp Gln Leu Ser Asn Leu Ser Asn Leu Leu Gln Gln Tyr Lys Thr	
	260
Leu Ala Tyr Pro Phe Gln Ser Leu Leu Tyr Leu Leu Ala Leu Ser	
	275
Thr Ile Ser Ala Phe Asp Arg Ile Asp Phe Ala Lys Ile Ser Val Ala	
	290
Ile Arg Asn Phe Leu Ala Leu Asp Pro Thr Ala Leu Ala Ser Phe Leu	
	305
Tyr Phe Thr Ala Leu Ile Leu Ser Leu Ser Gln Gln Met Thr Ser Asp	
	325
Arg Ile His Leu Tyr Thr Pro Ser Ser Val Asn Gly Ser Leu Trp Glu	
	335

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<210> 3033
<211> 477
<212> PRT
<213> Homo sapiens
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4705

355	Ile Arg Leu Gly	360	Ile Glu Gly Tyr Pro Thr Tyr Lys Glu Lys Val Lys
370	Lys Arg Pro Gly Gly Arg Pro Glu Val Ile Tyr Asn Tyr Val Gln Arg	380	
385	Pro Phe Ile Arg Met Ser Trp Glu Lys Glu Glu Gly Lys Ser Arg His	395	400
405	Val Asp Phe Gln Cys Val Lys Ser Lys Ser Ile Thr Asn Leu Ala Ala	410	415
420	Ala Ala Ala Asp Ile Pro Gln Asp Gln Leu Val Val Met His Pro Thr	425	430
435	Pro Gln Val Asp Glu Leu Asp Ile Leu Pro Ile His Pro Pro Ser Gly	440	445
450	Asn Ser Asp Leu Asp Pro Asp Ala Gln Asn Pro Met Leu	460	
465		470	475 477

<210> 3034
 <211> 656
 <212> PRT
 <213> Homo sapiens

<400> 3034

Ser Ser Leu Ala Gln His Arg Ser Val Ala Val Leu Gly Trp Pro Ala	1	5	10	15
Gly Trp Ala Ala Arg Ala Arg Pro Ala Met Gln Gly Gly Asn Ser	20	25	30	
Gly Val Arg Lys Arg Glu Glu Glu Gly Asp Gly Ala Gly Ala Val Ala	35	40	45	
Ala Pro Pro Ala Ile Asp Phe Pro Ala Glu Gly Pro Asp Pro Glu Tyr	50	55	60	
Asp Glu Ser Asp Val Pro Ala Glu Ile Gln Val Leu Lys Glu Pro Leu	65	70	75	80
Gln Gln Pro Thr Phe Pro Phe Ala Val Ala Asn Gln Leu Leu Leu Val	85	90	95	
Ser Leu Leu Glu His Leu Ser His Val His Glu Pro Asn Pro Leu Arg	100	105	110	
Ser Arg Gln Val Phe Lys Leu Leu Cys Gln Thr Phe Ile Lys Met Gly	115	120	125	
Leu Leu Ser Ser Phe Thr Cys Ser Asp Glu Phe Ser Ser Leu Arg Leu	130	135	140	
His His Asn Arg Ala Ile Thr His Leu Met Arg Ser Ala Lys Glu Arg	145	150	155	160
Val Arg Gln Asp Pro Cys Glu Asp Ile Ser Arg Ile Gln Lys Ile Arg	165	170	175	
Ser Arg Glu Val Ala Leu Glu Ala Gln Thr Ser Arg Tyr Leu Asn Glu	180	185	190	
Phe Glu Glu Leu Ala Ile Leu Gly Lys Gly Gly Tyr Gly Arg Val Tyr	195	200	205	
Lys Val Arg Asn Lys Leu Asp Gly Gln Tyr Tyr Ala Ile Lys Lys Ile	210	215	220	
Leu Ile Lys Gly Ala Thr Lys Thr Val Cys Met Lys Val Leu Arg Glu	225	230	235	240
Val Lys Val Leu Ala Gly Leu Gln His Pro Asn Ile Val Gly Tyr His	245	250	255	
Thr Ala Trp Ile Glu His Val His Val Ile Gln Pro Arg Ala Asp Arg	260	265	270	
Ala Ala Ile Glu Leu Pro Ser Leu Glu Val Leu Ser Asp Gln Glu Glu	275	280	285	
Asp Arg Glu Gln Cys Gly Val Lys Asn Asp Glu Ser Ser Ser Ser Ser	290	295	300	
Ile Ile Phe Ala Glu Pro Thr Pro Glu Lys Glu Lys Arg Phe Gly Glu				

305					310					315				320
Ser	Asp	Thr	Glu	Asn	Gln	Asn	Asn	Lys	Ser	Val	Lys	Tyr	Thr	Thr
				325					330					335
Leu	Val	Ile	Arg	Glu	Ser	Gly	Glu	Leu	Glu	Ser	Thr	Leu	Glu	Leu
				340				345						350
Glu	Asn	Gly	Leu	Ala	Gly	Leu	Ser	Ala	Ser	Ser	Ile	Val	Glu	Gln
				355				360						365
Leu	Pro	Leu	Arg	Arg	Asn	Ser	His	Leu	Glu	Glu	Ser	Phe	Thr	Ser
								375				380		
Glu	Glu	Ser	Ser	Glu	Glu	Asn	Val	Asn	Phe	Leu	Gly	Gln	Thr	Glu
								390				395		400
Gln	Tyr	His	Leu	Met	Leu	His	Ile	Gln	Met	Gln	Leu	Cys	Glu	Leu
				405					410					415
Leu	Trp	Asp	Trp	Ile	Val	Glu	Arg	Asn	Lys	Arg	Gly	Arg	Glu	Tyr
				420					425					430
Asp	Glu	Ser	Ala	Cys	Pro	Tyr	Val	Met	Ala	Asn	Val	Ala	Thr	Lys
				435				440				445		
Phe	Gln	Glu	Leu	Val	Glu	Gly	Val	Phe	Tyr	Ile	His	Asn	Met	Gly
								455				460		
Val	His	Arg	Asp	Leu	Lys	Pro	Arg	Asn	Ile	Phe	Leu	His	Gly	Pro
								470				475		480
Gln	Gln	Val	Lys	Ile	Gly	Asp	Phe	Gly	Leu	Ala	Cys	Thr	Asp	Ile
				485					490					495
Gln	Lys	Asn	Thr	Asp	Trp	Thr	Asn	Arg	Asn	Gly	Lys	Arg	Thr	Pro
				500					505					510
His	Thr	Ser	Arg	Val	Gly	Thr	Cys	Leu	Tyr	Ala	Ser	Pro	Glu	Gln
				515				520				525		
Glu	Gly	Ser	Glu	Tyr	Asp	Ala	Lys	Ser	Asp	Met	Tyr	Ser	Leu	Gly
								535				540		Val
Val	Leu	Leu	Glu	Leu	Phe	Gln	Pro	Phe	Gly	Thr	Glu	Met	Glu	Arg
					550				555					560
Glu	Val	Leu	Thr	Gly	Leu	Arg	Thr	Gly	Gln	Leu	Pro	Glu	Ser	Leu
				565					570					575
Lys	Arg	Cys	Pro	Val	Gln	Ala	Lys	Tyr	Ile	Gln	His	Leu	Thr	Arg
				580				585						590
Asn	Ser	Ser	Gln	Arg	Pro	Ser	Ala	Ile	Gln	Leu	Leu	Gln	Ser	Glu
				595			600					605		
Phe	Gln	Asn	Ser	Gly	Asn	Val	Asn	Leu	Thr	Leu	Gln	Met	Lys	Ile
				610			615					620		
Glu	Gln	Glu	Lys	Glu	Ile	Ala	Glu	Leu	Lys	Lys	Gln	Leu	Asn	Leu
				625			630			635				640
Ser	Gln	Asp	Lys	Gly	Val	Arg	Asp	Asp	Gly	Lys	Asp	Gly	Gly	Val
				645					650					655
														656

<210> 3035

<211> 354

<212> PRT

<213> Homo sapiens

<400> 3035

Lys	Leu	Ser	Cys	Pro	Cys	Ser	His	Gly	Thr	Arg	Val	Thr	Ala	Val	Arg
1				5					10					15	
Gly	Pro	Arg	Leu	Lys	Ala	Gly	Val	Gln	Trp	His	Asp	Leu	Gly	Ser	Leu
			20					25					30		
Gln	Pro	Pro	Pro	Ser	Gly	Leu	Lys	Gln	Ser	Ser	His	Leu	Ser	Leu	Ser
			35				40					45			
Ser	Ser	Trp	Asp	Phe	Arg	His	Ala	Pro	Thr	His	Pro	Glu	Thr	Tyr	Thr
		50				55					60				
Cys	Pro	Lys	Met	Ile	Glu	Met	Glu	Gln	Ala	Glu	Ala	Gln	Leu	Ala	Glu

65	70	75	80
Leu Asp Leu Leu Ala Ser Met Phe Pro Gly Glu Asn Glu Leu Ile Val			
	85	90	95
Asn Asp Gln Leu Ala Val Ala Glu Leu Lys Asp Cys Ile Glu Lys Lys			
	100	105	110
Thr Met Glu Gly Arg Ser Ser Lys Val Tyr Phe Thr Ile Asn Met Asn			
	115	120	125
Leu Asp Val Ser Asp Glu Lys Met Ala Met Phe Ser Leu Ala Cys Ile			
	130	135	140
Leu Pro Phe Lys Tyr Pro Ala Val Leu Pro Glu Ile Thr Val Arg Ser			
	145	150	155
Val Leu Leu Ser Arg Ser Gln Gln Thr Gln Leu Asn Thr Asp Leu Thr			
	165	170	175
Ala Phe Leu Gln Lys His Cys His Gly Asp Val Cys Ile Leu Asn Ala			
	180	185	190
Thr Glu Trp Val Arg Glu His Ala Ser Gly Tyr Val Ser Arg Asp Thr			
	195	200	205
Ser Ser Ser Pro Thr Thr Gly Ser Thr Val Gln Ser Val Asp Leu Ile			
	210	215	220
Phe Thr Arg Leu Trp Ile Tyr Ser His His Ile Tyr Asn Lys Cys Lys			
	225	230	235
Arg Lys Asn Ile Leu Glu Trp Ala Lys Glu Leu Ser Leu Ser Gly Phe			
	245	250	255
Ser Met Pro Gly Lys Pro Gly Val Val Cys Val Glu Gly Pro Gln Ser			
	260	265	270
Ala Cys Glu Glu Phe Trp Ala Arg Leu Arg Lys Leu Asn Trp Lys Arg			
	275	280	285
Ile Leu Ile Arg His Arg Glu Asp Ile Pro Phe Asp Gly Thr Asn Asp			
	290	295	300
Glu Thr Glu Arg Gln Arg Lys Phe Ser Ile Phe Glu Glu Lys Val Phe			
	305	310	315
Ser Val Asn Gly Ala Arg Gly Asn His Met Asp Phe Gly Gln Leu Tyr			
	325	330	335
Gln Phe Leu Asn Thr Lys Gly Cys Gly Asp Val Phe Gln Met Phe Leu			
	340	345	350
Trp Val			
354			

<210> 3036

<211> 762

<212> PRT

<213> Homo sapiens

<400> 3036

Phe Arg Phe Ala Glu Arg Arg Ala Ala Ala Glu Ser Asp Val Ser	
1	5
Ala Lys Met Ala Gly Arg Ser Met Gln Ala Ala Arg Cys Pro Thr Asp	
	20
Glu Leu Ser Leu Thr Asn Cys Ala Val Val Asn Glu Lys Asp Phe Gln	
	35
Ser Gly Gln His Val Ile Val Arg Thr Ser Pro Asn His Arg Tyr Thr	
	50
Phe Thr Leu Lys Thr His Pro Ser Val Val Pro Gly Ser Ile Ala Phe	
	65
Ser Leu Pro Gln Arg Lys Trp Ala Gly Leu Ser Ile Gly Gln Glu Ile	
	85
Glu Val Ser Leu Tyr Thr Phe Asp Lys Ala Lys Gln Cys Ile Gly Thr	
	100
Met Thr Ile Glu Ile Asp Phe Leu Gln Lys Lys Ser Ile Asp Ser Asn	
	115
Pro Tyr Asp Thr Asp Lys Met Ala Ala Glu Phe Ile Gln Gln Phe Asn	

130	135	140
Asn Gln Ala Phe Ser Val	Gly Gln Gln Leu Val Phe Ser Phe Asn Glu	
145	150	155
Lys Leu Phe Gly Leu Leu Val	Lys Asp Ile Glu Ala Met Asp Pro Ser	160
	165	170
Ile Leu Asn Gly Glu Pro Ala Thr Gly Lys Arg Gln Lys Ile Glu Val		175
	180	185
Gly Leu Val Val Gly Asn Ser Gln Val Ala Phe Glu Lys Ala Glu Asn		190
	195	200
Ser Ser Leu Asn Leu Ile Gly Lys Ala Lys Thr Lys Glu Asn Arg Gln		205
	210	215
Ser Ile Ile Asn Pro Asp Trp Asn Phe Glu Lys Met Gly Ile Gly Gly		220
225	230	235
Leu Asp Lys Glu Phe Ser Asp Ile Phe Arg Arg Ala Phe Ala Ser Arg		240
	245	250
Val Phe Pro Pro Glu Ile Val Glu Gln Met Gly Cys Lys His Val Lys		255
	260	265
Gly Ile Leu Leu Tyr Gly Pro Pro Gly Cys Gly Lys Thr Leu Leu Ala		270
	275	280
Arg Gln Ile Gly Lys Met Leu Asn Ala Arg Glu Pro Lys Val Val Asn		285
	290	295
Gly Pro Glu Ile Leu Asn Lys Tyr Val Gly Glu Ser Glu Ala Asn Ile		300
305	310	315
Arg Lys Leu Phe Ala Asp Ala Glu Glu Glu Gln Arg Arg Leu Gly Ala		320
	325	330
Asn Ser Gly Leu His Ile Ile Ile Phe Asp Glu Ile Asp Ala Ile Cys		335
	340	345
Lys Gln Arg Gly Ser Met Ala Gly Ser Thr Gly Val His Asp Thr Val		350
	355	360
Val Asn Gln Leu Leu Ser Lys Ile Asp Gly Val Glu Gln Leu Asn Asn		365
	370	375
Ile Leu Val Ile Gly Met Thr Asn Arg Pro Asp Leu Ile Asp Glu Ala		380
385	390	395
Leu Leu Arg Pro Gly Arg Leu Glu Val Lys Met Glu Ile Gly Leu Pro		400
	405	410
Asp Glu Lys Gly Arg Leu Gln Ile Leu His Ile His Thr Ala Arg Met		415
	420	425
Arg Gly His Gln Leu Leu Ser Ala Asp Val Asp Ile Lys Glu Leu Ala		430
	435	440
Val Glu Thr Lys Asn Phe Ser Gly Ala Glu Leu Glu Gly Leu Val Arg		445
	450	455
Ala Ala Gln Ser Thr Ala Met Asn Arg His Ile Lys Ala Ser Thr Lys		460
465	470	475
Val Glu Val Asp Met Glu Lys Ala Glu Ser Leu Gln Val Thr Arg Gly		480
	485	490
Asp Phe Leu Ala Ser Leu Glu Asn Asp Ile Lys Pro Ala Phe Gly Thr		495
	500	505
Asn Gln Glu Asp Tyr Ala Ser Tyr Ile Met Asn Gly Ile Ile Lys Trp		510
	515	520
Gly Asp Pro Val Thr Arg Val Leu Asp Asp Gly Glu Leu Leu Val Gln		525
	530	535
Gln Thr Lys Asn Ser Asp Arg Thr Pro Leu Val Ser Val Leu Leu Glu		540
545	550	555
Gly Pro Pro His Ser Gly Lys Thr Ala Leu Ala Ala Lys Ile Ala Glu		560
	565	570
Glu Ser Asn Phe Pro Phe Ile Lys Ile Cys Ser Pro Asp Lys Met Ile		575
	580	585
Gly Phe Ser Glu Thr Ala Lys Cys Gln Ala Met Lys Lys Ile Phe Asp		590
	595	600
Asp Ala Tyr Lys Ser Gln Leu Ser Cys Val Val Val Asp Asp Ile Glu		605
	610	615
Arg Leu Leu Asp Tyr Val Pro Ile Gly Pro Arg Phe Ser Asn Leu Val		620
625	630	635
Leu Gln Ala Leu Leu Val Leu Leu Lys Lys Ala Pro Pro Gln Gly Arg		640

				645					650					655			
Lys	Leu	Leu	Ile	Ile	Gly	Thr	Thr	Ser	Arg	Lys	Asp	Val	Leu	Gln	Glu		
			660					665					670				
Met	Glu	Met	Leu	Asn	Ala	Phe	Ser	Thr	Thr	Ile	His	Val	Pro	Asn	Ile		
		675					680					685					
Ala	Thr	Gly	Glu	Gln	Leu	Leu	Glu	Ala	Leu	Glu	Leu	Gly	Asn	Phe			
	690					695				700							
Lys	Asp	Lys	Glu	Arg	Thr	Thr	Ile	Ala	Gln	Gln	Val	Lys	Gly	Lys	Lys		
705					710				715						720		
Val	Trp	Ile	Gly	Ile	Lys	Lys	Leu	Leu	Met	Leu	Ile	Glu	Met	Ser	Leu		
			725					730					735				
Gln	Met	Asp	Pro	Glu	Tyr	Arg	Val	Arg	Lys	Phe	Leu	Ala	Leu	Leu	Arg		
			740					745					750				
Glu	Glu	Gly	Ala	Ser	Pro	Leu	Asp	Phe	Asp								
		755					760		762								

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<210> 3037
<211> 449
<212> PRT
<213> Homo sapiens
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<400> 3037															
Met	Leu	Asp	Thr	Gly	Ser	Glu	His	Leu	Asn	Arg	Ile	Leu	Lys	Ala	Leu
1				5					10					15	
Pro	Ala	Leu	Gln	Ser	Ala	Gly	Ser	Glu	Gly	Gln	Asn	Gly	Ser	Ala	Glu
			20					25					30		
Ser	Leu	Gly	Glu	Gly	Gly	Thr	Arg	Asp	Ser	Asp	Arg	Ala	Arg	Arg	Lys
		35					40					45			
Leu	Arg	Gly	Gly	Asn	Lys	Glu	Ile	Pro	Thr	Phe	Tyr	Pro	Cys	Leu	Val
	50					55					60				
Val	Arg	Ser	Pro	Val	Thr	Ala	Ser	Asp	Leu	Arg	Gly	Thr	Gln	Asp	Phe
65					70					75					80
Ala	Ala	Tyr	His	Gly	Leu	Ser	Leu	Ile	Leu	Glu	Pro	Leu	Gly	Ala	Cys
			85						90					95	
Asn	Arg	Leu	Ser	Val	Cys	Val	Pro	Val	His	Ser	Pro	Pro	Gly	Met	Arg
			100					105					110		
Val	Ser	Pro	Arg	Ser	Pro	Ser	Leu	Arg	Thr	Leu	Val	Ile	Asp	Pro	Ala
		115					120					125			
Glu	Pro	Ala	Gly	Ala	Gln	Arg	Leu	Arg	Phe	Ser	Gly	Lys	Glu	Arg	Ser
	130					135					140				
Gly	Glu	Ala	Gly	Ser	Ala	Val	Glu	Gly	Leu	Ala	Val	Ala	Val	Ser	Met
145					150					155					160
Gly	Asp	Gly	Gly	Ala	Glu	Arg	Asp	Arg	Gly	Pro	Ala	Arg	Arg	Ala	Glu
			165						170					175	
Ser	Gly	Gly	Gly	Gly	Gly	Arg	Cys	Gly	Asp	Arg	Ser	Gly	Ala	Gly	Asp
			180					185					190		
Leu	Arg	Ala	Asp	Gly	Gly	Gly	His	Ser	Pro	Thr	Glu	Val	Ala	Gly	Thr
	195						200					205			
Ser	Ala	Ser	Ser	Pro	Ala	Gly	Ser	Arg	Glu	Ser	Gly	Ala	Asp	Ser	Asp
	210					215					220				
Gly	Gln	Pro	Gly	Pro	Gly	Glu	Ala	Asp	His	Cys	Arg	Arg	Ile	Leu	Val
225					230					235					240
Arg	Asp	Ala	Lys	Gly	Thr	Ile	Arg	Glu	Ile	Val	Leu	Pro	Lys	Gly	Leu
			245						250					255	
Asp	Leu	Asp	Arg	Pro	Lys	Arg	Thr	Arg	Thr	Phe	Phe	Thr	Ala	Glu	Gln
			260					265					270		
Leu	Tyr	Arg	Leu	Glu	Met	Glu	Phe	Gln	Arg	Cys	Gln	Tyr	Val	Val	Gly
	275						280					285			
Arg	Glu	Arg	Thr	Glu	Leu	Ala	Arg	Gln	Leu	Asn	Leu	Ser	Glu	Thr	Gln
	290					295					300				
Val	Lys	Val	Trp	Phe	Gln	Asn	Arg	Arg	Thr	Lys	Gln	Lys	Lys	Asp	Gln

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305              310              315              320
Ser Arg Asp Leu Glu Lys Arg Ala Ser Ser Ser Ala Ser Glu Ala Phe
              325              330              335
Ala Thr Ser Asn Ile Leu Arg Leu Leu Glu Gln Gly Arg Leu Leu Ser
              340              345              350
Val Pro Arg Ala Pro Ser Leu Leu Ala Leu Thr Pro Ser Leu Pro Gly
              355              360              365
Leu Pro Ala Ser His Arg Gly Thr Ser Leu Gly Asp Pro Arg Asn Ser
              370              375              380
Ser Pro Arg Leu Asn Pro Leu Ser Ser Ala Ser Ala Ser Pro Pro Leu
385              390              395              400
Pro Pro Pro Leu Pro Ala Val Cys Phe Ser Ser Ala Pro Leu Leu Asp
              405              410              415
Leu Pro Ala Gly Tyr Glu Leu Gly Ser Ser Ala Phe Glu Pro Tyr Ser
              420              425              430
Trp Leu Glu Arg Lys Val Gly Ser Ala Ser Ser Cys Lys Lys Ala Asn
              435              440              445
Thr
449

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<210> 3038
<211> 140
<212> PRT
<213> Homo sapiens

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<400> 3038
Thr Glu Leu Leu Pro Leu Cys Ser Arg Ser Gly Pro Lys Pro Gln Ser
 1              5              10              15
Gly Asp Pro Leu Leu Gln Leu Ala Gln Gln Ala Arg Pro Arg Leu Ser
              20              25              30
Gly Glu Arg Leu Glu Thr Ala Pro Ser Leu Leu Leu Ser Arg Met Ala
              35              40              45
Cys Val Ile Ser Gly Trp Ala Leu Ser Arg Gly Ala Arg Thr Trp Thr
              50              55              60
Trp Ala Thr Pro Thr Gly Pro Val His Arg Ala Gln Pro Ala Ile Arg
65              70              75              80
Ser Leu Ser Ala Glu Gly Ala Leu Thr Arg Leu Lys Glu Glu Lys Trp
              85              90              95
Pro Gly Arg Tyr Ile Leu Pro Asn His Leu Thr Pro Pro Phe Leu Tyr
              100              105              110
Lys His Leu Gly Ser Val Pro Pro Ser His Trp Arg Ser Pro Leu Ile
              115              120              125
Ser His Ser Val Asn Ile Leu Ala Leu Asn Trp Arg
130              135              140

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<210> 3039
<211> 383
<212> PRT
<213> Homo sapiens

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<400> 3039
Ala Cys Gly Ile Arg His Glu Gly Ala Leu Pro Gly Leu Thr Ala Thr
 1              5              10              15
Pro Glu Ala Met Leu Arg Phe Leu Pro Asp Leu Ala Phe Ser Phe Leu
              20              25              30
Leu Ile Leu Ala Leu Gly Gln Ala Val Gln Phe Gln Glu Tyr Val Phe
              35              40              45
Leu Gln Phe Leu Gly Leu Asp Lys Ala Pro Ser Pro Gln Lys Phe Gln

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```
<210> 3040
<211> 277
<212> PRT
<213> Homo sapiens
```

4712

```
<210> 3041
<211> 280
<212> PRT
<213> Homo sapiens
```

<400> 3041															
Gly 1	Leu	Lys	Arg	Arg 5	Arg	Leu	Cys	Phe	Ala 10	Lys	Val	Gly	Asp	Val 15	Leu
Gly	Cys	Leu	Ser	Leu 20	Pro	Pro	Ser	Arg 25	Ser	Ala	Arg	Val	Leu 30	Glu	Asp
Ile	Ser	Ile	Leu 35	Ser	Cys	Ile	Ser 40	Val	Asp	Ser	Arg	Ile 45	Val	Arg	Thr
Lys	Val	Pro	Cys	Ser	Val	Thr 55	Met	Ser	Arg	Pro	Arg	Lys 60	Arg	Leu	Ala
Gly 65	Thr	Ser	Gly	Ser	Asp 70	Lys	Gly	Leu	Ser	Gly 75	Lys	Arg	Thr	Lys 80	Thr
Glu	Asn	Ser	Gly	Glu 85	Ala	Leu	Ala	Lys	Val 90	Glu	Asp	Ser	Asn	Pro 95	Gln
Lys	Thr	Ser	Ala 100	Thr	Lys	Asn	Cys	Leu	Lys 105	Asn	Leu	Ser	Ser 110	His	Trp
Leu	Met	Lys 115	Ser	Glu	Pro	Glu	Ser 120	Arg	Leu	Glu	Lys	Gly 125	Val	Asp	Val
Lys	Phe 130	Ser	Ile	Glu	Asp	Leu 135	Lys	Ala	Gln	Pro	Lys	Gln 140	Thr	Thr	Cys
Trp 145	Asp	Gly	Val	Arg	Asn 150	Tyr	Gln	Ala	Arg	Asn 155	Phe	Leu	Arg	Ala 160	Met
Lys	Leu	Gly	Glu	Glu 165	Ala	Phe	Phe	Tyr	His 170	Ser	Asn	Cys	Lys	Glu 175	Pro
Gly	Ile	Ala	Gly 180	Leu	Met	Lys	Ile	Val 185	Lys	Glu	Ala	Tyr	Pro 190	Asp	His
Thr	Gln	Phe 195	Glu	Lys	Asn	Asn 200	Pro	His	Tyr	Asp	Pro	Ser 205	Ser	Lys	Glu
Asp	Asn 210	Pro	Lys	Trp	Ser	Met 215	Val	Asp	Val	Gln	Phe	Val 220	Arg	Met	Met
Lys	Arg	Phe	Ile	Pro	Leu	Ala	Glu	Leu	Lys	Ser	Tyr	His	Gln	Ala	His
225					230					235					240
Lys	Ala	Thr	Gly	Gly	Pro	Leu	Lys	Asn	Met	Val	Leu	Phe	Thr	Arg	Gln

				245					250					255	
Arg	Leu	Ser	Ile	Gln	Pro	Leu	Thr	Gln	Glu	Glu	Phe	Asp	Phe	Val	Leu
			260					265					270		
Ser	Leu	Glu	Glu	Lys	Glu	Pro	Ser								
		275					280								

<210> 3042
 <211> 280
 <212> PRT
 <213> Homo sapiens

<400> 3042

Gly	Leu	Lys	Arg	Arg	Arg	Leu	Cys	Phe	Ala	Lys	Val	Gly	Asp	Val	Leu
1				5					10					15	
Gly	Cys	Leu	Ser	Leu	Pro	Pro	Ser	Arg	Ser	Ala	Arg	Val	Leu	Glu	Asp
		20						25				30			
Ile	Ser	Ile	Leu	Ser	Cys	Ile	Ser	Val	Asp	Ser	Arg	Ile	Val	Arg	Thr
	35					40						45			
Lys	Val	Pro	Cys	Ser	Val	Thr	Met	Ser	Arg	Pro	Arg	Lys	Arg	Leu	Ala
	50					55				60					
Gly	Thr	Ser	Gly	Ser	Asp	Lys	Gly	Leu	Ser	Gly	Lys	Arg	Thr	Lys	Thr
	65				70					75				80	
Glu	Asn	Ser	Gly	Glu	Ala	Leu	Ala	Lys	Val	Glu	Asp	Ser	Asn	Pro	Gln
			85					90						95	
Lys	Thr	Ser	Ala	Thr	Lys	Asn	Cys	Leu	Lys	Asn	Leu	Ser	Ser	His	Trp
			100					105						110	
Leu	Met	Lys	Ser	Glu	Pro	Glu	Ser	Arg	Leu	Glu	Lys	Gly	Val	Asp	Val
	115						120					125			
Lys	Phe	Ser	Ile	Glu	Asp	Leu	Lys	Ala	Gln	Pro	Lys	Gln	Thr	Thr	Cys
	130					135					140				
Trp	Asp	Gly	Val	Arg	Asn	Tyr	Gln	Ala	Arg	Asn	Phe	Leu	Arg	Ala	Met
	145				150					155				160	
Lys	Leu	Gly	Glu	Glu	Ala	Phe	Phe	Tyr	His	Ser	Asn	Cys	Lys	Glu	Pro
			165					170						175	
Gly	Ile	Ala	Gly	Leu	Met	Lys	Ile	Val	Lys	Glu	Ala	Tyr	Pro	Asp	His
		180						185					190		
Thr	Gln	Phe	Glu	Lys	Asn	Asn	Pro	His	Tyr	Asp	Pro	Ser	Ser	Lys	Glu
	195						200					205			
Asp	Asn	Pro	Lys	Trp	Ser	Met	Val	Asp	Val	Gln	Phe	Val	Arg	Met	Met
	210					215					220				
Lys	Arg	Phe	Ile	Pro	Leu	Ala	Glu	Leu	Lys	Ser	Tyr	His	Gln	Ala	His
	225				230					235				240	
Lys	Ala	Thr	Gly	Gly	Pro	Leu	Lys	Asn	Met	Val	Leu	Phe	Thr	Arg	Gln
			245						250					255	
Arg	Leu	Ser	Ile	Gln	Pro	Leu	Thr	Gln	Glu	Glu	Phe	Asp	Phe	Val	Leu
			260					265						270	
Ser	Leu	Glu	Glu	Lys	Glu	Pro	Ser								
		275					280								

<210> 3043
 <211> 326
 <212> PRT
 <213> Homo sapiens

<400> 3043

Val	Gly	Thr	Ala	Pro	Ala	Pro	Gly	Gly	Arg	Asp	Arg	Ala	Pro	Ala	Met
1				5					10					15	
Gly	Ser	Phe	Gln	Leu	Glu	Asp	Phe	Ala	Ala	Gly	Trp	Ile	Gly	Gly	Ala

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<210> 3044
<211> 425
<212> PRT
<213> Homo sapiens
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4715

115	120	125
Tyr Gly His Pro Leu Phe	Pro Leu Leu Ala Leu Gly	Phe Glu Lys Cys
130	135	140
Glu Leu Ala Thr Cys Ser	Pro Arg Asp Gly Ala Gly	Ala Gly Leu Gly
145	150	155
Thr Pro Arg Gly Gly Asp Val	Cys Ser Ser Asp Ser	Phe Asn Glu Asp
165	170	175
Asn Thr Ala Phe Ala Lys Gln Val	Cys Ser Glu Arg Pro	Phe Ser Ser
180	185	190
Asn Pro Glu Leu Asp Asn Leu Met Ile	Gln Ala Ile Gln Val Leu Arg	
195	200	205
Phe His Leu Leu Glu Leu Glu Lys Gly	Lys Met Pro Ile Asp Leu Val	
210	215	220
Ile Glu Asp Arg Asp Gly Cys Arg Glu	Asp Phe Glu Asp Tyr Pro	
225	230	235
Ala Pro Cys Pro Ser Leu Pro Asp Gln	Asn Asn Ile Trp Ile Arg Asp	
245	250	255
His Glu Asp Ser Gly Ser Val His Leu	Gly Thr Pro Gly Pro Ser Ser	
260	265	270
Gly Gly Leu Ala Ser Gln Ser Gly Asp	Asn Ser Ser Asp Gln Gly Val	
275	280	285
Gly Leu Asp Thr Ser Val Ala Ser Pro	Ser Ser Gly Gly Glu Asp Glu	
290	295	300
Asp Leu Asp Gln Glu Pro Arg Arg Asn	Lys Lys Arg Gly Ile Phe Pro	
305	310	315
Lys Val Ala Thr Asn Ile Met Arg Ala	Trp Leu Phe Gln His Leu Ser	
325	330	335
His Pro Tyr Pro Ser Glu Glu Gln Lys	Lys Gln Leu Ala Gln Asp Thr	
340	345	350
Gly Leu Thr Ile Leu Gln Val Asn Asn	Trp Phe Ile Asn Ala Arg Arg	
355	360	365
Arg Ile Val Gln Pro Met Ile Asp Gln	Ser Asn Arg Thr Gly Gln Gly	
370	375	380
Ala Ala Phe Ser Pro Glu Gly Gln Pro	Ile Gly Gly Tyr Thr Glu Thr	
385	390	395
Glu Pro His Val Ala Phe Arg Ala Pro	Ala Ser Val Gly Met Ser Leu	
405	410	415
Asn Ser Glu Gly Glu Trp His Tyr Leu		
420	425	

<210> 3045
 <211> 321
 <212> PRT
 <213> Homo sapiens

<400> 3045
 Val Ala His Thr Gln Trp His Thr Cys Gln Arg Leu Ser Gln Leu Thr
 1 5 10 15
 His Arg Ser Ile Leu Lys Tyr Leu Leu Ile Asp Thr His Ala Cys Gln
 20 25 30
 Val Leu Ile Leu Lys His Thr His Ala Ser Leu Ser Leu Pro Ser Cys
 35 40 45
 Gln Glu Cys Phe Pro Ser Ser Ile Pro Ser Ala Ser His Met Val Ser
 50 55 60
 His Pro His Pro Pro Pro Ser Pro Arg Trp Gly Gln Thr Pro Glu Gly
 65 70 75 80
 Leu Pro Ala Ala Ser Pro Cys Gly Pro Gly Pro Arg Ser Cys Phe Ser
 85 90 95
 Ser Ile Leu Pro Thr Gly Asp Ser Trp Gly Met Leu Ala Cys Leu Cys
 100 105 110
 Thr Val Leu Trp His Leu Pro Ala Val Pro Ala Leu Asn Arg Thr Gly

115	120	125
Asp Pro Gly Pro Gly Pro Ser Ile Gln Lys Thr Tyr Asp Leu Thr Arg		
130	135	140
Tyr Leu Glu His Gln Leu Arg Ser Leu Ala Gly Thr Tyr Leu Asn Tyr		
145	150	155
Leu Gly Pro Pro Phe Asn Glu Pro Asp Phe Asn Pro Pro Arg Leu Gly		
165	170	175
Ala Glu Thr Leu Pro Arg Ala Thr Val Asp Leu Glu Val Trp Arg Ser		
180	185	190
Leu Asn Asp Lys Leu Arg Leu Thr Gln Asn Tyr Glu Ala Tyr Ser His		
195	200	205
Leu Leu Cys Tyr Leu Arg Gly Leu Asn Arg Gln Ala Ala Thr Ala Glu		
210	215	220
Leu Arg Arg Ser Leu Ala His Phe Cys Thr Ser Leu Gln Gly Leu Leu		
225	230	235
Gly Ser Ile Ala Gly Val Met Ala Ala Leu Gly Tyr Pro Leu Pro Gln		
245	250	255
Pro Leu Pro Gly Thr Glu Pro Thr Trp Thr Pro Gly Pro Ala His Ser		
260	265	270
Asp Phe Leu Gln Lys Met Asp Asp Phe Trp Leu Leu Lys Glu Leu Gln		
275	280	285
Thr Trp Leu Trp Arg Ser Ala Lys Asp Phe Asn Arg Leu Lys Lys Lys		
290	295	300
Met Gln Pro Pro Ala Ala Ala Val Thr Leu His Leu Gly Ala His Gly		
305	310	315
Phe		320
321		

<210> 3046
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 3046

Met Tyr Ala Tyr Met Tyr Ile Cys Thr His Ile Cys Ile Cys Ala Tyr	
1 5 10 15	
Arg Gly Ile His Ile Asp Val Tyr Leu Tyr Met Cys Ile Tyr Ile His	
20 25 30	
Ile Trp Ile His Thr Tyr Leu Cys Val His Ile Tyr Val Tyr Val Tyr	
35 40 45	
Ile Cys Thr His Ile Cys Met Cys Ile His Thr Tyr Val Tyr Val Tyr	
50 55 60	
Thr Tyr Met Tyr Val Tyr Thr Tyr Ile Cys Leu Cys Val Tyr Ile Cys	
65 70 75 80	
Leu Cys Val His Ile Tyr Leu Cys Val Tyr Ile His Met Tyr Met Cys	
85 90 95	
Thr His Ile Cys Met Cys Ile His Thr Tyr Val His Met Cys Ile Cys	
100 105 110	
Val Tyr Ile His Met Tyr Thr Cys Val Tyr Val Tyr Thr Tyr Thr Cys	
115 120 125	
Val Tyr Met Tyr	
130 132	

<210> 3047
 <211> 226
 <212> PRT
 <213> Homo sapiens

<400> 3047

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Ser Leu Asp Leu Leu Gly Pro Ile Gly Ile Leu Gln Glu Gly Arg Asp
 1           5           10           15
Pro Gly Thr Gln Gly Pro Gln Glu Lys Glu Lys Gln Met Pro Ala Ser
           20           25           30
Pro Met Asn Thr Asp Ala His Leu Asp Ile Asn Phe Lys Glu Gly Leu
           35           40           45
Lys Lys Glu Arg Ser Tyr Thr Gly Gln Phe Glu Ala Asn Val Arg Asp
           50           55           60
Glu Glu Arg Gln Cys Gly Cys Gly Val Val Pro Asp Ser Leu Leu Met
           65           70           75           80
Lys Val Leu Ser Gln Arg Leu Asp Gln Gln Asp Cys Ile Gln Lys Gly
           85           90           95
Trp Val Leu His Gly Val Pro Arg Asp Leu Asp Gln Ala His Leu Leu
           100          105          110
Asn Arg Leu Gly Tyr Asn Pro Asn Arg Glu Phe Phe Leu Asn Val Pro
           115          120          125
Phe Asp Ser Ile Met Glu Arg Leu Thr Leu Arg Arg Ile Asp Pro Val
           130          135          140
Thr Gly Glu Arg Tyr His Leu Met Tyr Lys Pro Pro Pro Thr Met Glu
           145          150          155          160
Ile Gln Ala Arg Leu Leu Gln Asn Pro Lys Asp Ala Glu Glu Gln Val
           165          170          175
Lys Leu Lys Met Asp Leu Phe Tyr Arg Asn Ser Ala Asp Leu Glu Gln
           180          185          190
Leu Tyr Gly Ser Ala Ile Thr Leu Asn Gly Asp Gln Asp Pro Tyr Thr
           195          200          205
Val Phe Glu Tyr Ile Glu Ser Gly Ile Ile Asn Pro Leu Pro Lys Lys
           210          215          220
Ile Pro
225 226

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<210> 3048

<211> 388

<212> PRT

<213> Homo sapiens

<400> 3048

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Arg Pro Arg Arg Gly Gln Gly Leu Val Gln Glu Val Gln Thr Glu Asn
 1           5           10           15
Val Thr Val Ala Glu Gly Gly Val Ala Glu Ile Thr Cys Arg Leu His
           20           25           30
Gln Tyr Asp Gly Ser Ile Val Val Ile Gln Asn Pro Ala Arg Gln Thr
           35           40           45
Leu Phe Phe Asn Gly Thr Arg Ala Leu Lys Asp Glu Arg Phe Gln Leu
           50           55           60
Glu Glu Phe Ser Pro Arg Arg Val Arg Ile Arg Leu Ser Asp Ala Arg
           65           70           75           80
Leu Glu Asp Glu Gly Gly Tyr Phe Cys Gln Leu Tyr Thr Glu Asp Thr
           85           90           95
His His Gln Ile Ala Thr Leu Thr Val Leu Val Ala Pro Glu Asn Pro
           100          105          110
Val Val Glu Val Arg Glu Gln Ala Val Glu Gly Gly Glu Val Glu Leu
           115          120          125
Ser Cys Leu Val Pro Arg Ser Arg Pro Ala Ala Thr Leu Arg Trp Tyr
           130          135          140
Arg Asp Arg Lys Glu Leu Lys Gly Val Ser Ser Ser Gln Glu Asn Gly
           145          150          155          160
Lys Val Trp Ser Val Ala Ser Thr Val Arg Phe Arg Val Asp Arg Lys
           165          170          175
Asp Asp Gly Gly Ile Ile Ile Cys Glu Ala Gln Asn Gln Ala Leu Pro

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<210> 3049
<211> 758
<212> PRT
<213> Homo sapiens
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<div> <div><400> 3049</div> <div> <div>Val Gly Cys Thr Leu Arg Val Gly Val Met Ala Ala Ala Gly Ser Arg</div> <div>1 5 10 15</div> </div> </div>																	
<div> <div>Lys Arg Arg Leu Ala Glu Leu Thr Val Asp Glu Phe Leu Ala Ser Gly</div> <div>20 25 30</div> </div>																	
<div> <div>Phe Asp Ser Glu Ser Glu Ser Glu Asn Ser Pro Gln Ala Glu</div> <div>35 40 45</div> </div>																	
<div> <div>Thr Arg Glu Ala Arg Glu Ala Ala Arg Ser Pro Asp Lys Pro Gly Gly</div> <div>50 55 60</div> </div>																	
<div> <div>Ser Pro Ser Ala Ser Arg Arg Lys Gly Arg Ala Ser Glu His Lys Asp</div> <div>65 70 75 80</div> </div>																	
<div> <div>Gln Leu Ser Arg Leu Lys Asp Arg Asp Pro Glu Phe Tyr Lys Phe Leu</div> <div>85 90 95</div> </div>																	
<div> <div>Gln Glu Asn Asp Gln Ser Leu Leu Asn Phe Ser Asp Ser Asp Ser Ser</div> <div>100 105 110</div> </div>																	
<div> <div>Glu Glu Glu Glu Gly Pro Phe His Ser Leu Pro Asp Val Leu Glu Glu</div> <div>115 120 125</div> </div>																	
<div> <div>Ala Ser Glu Glu Glu Asp Gly Ala Glu Glu Gly Glu Asp Gly Asp Arg</div> <div>130 135 140</div> </div>																	
<div> <div>Val Pro Arg Gly Leu Lys Gly Lys Lys Asn Ser Val Pro Val Thr Val</div> <div>145 150 155 160</div> </div>																	
<div> <div>Ala Met Val Glu Arg Trp Lys Gln Ala Ala Lys Gln Arg Leu Thr Pro</div> <div>165 170 175</div> </div>																	
<div> <div>Lys Leu Phe His Glu Val Val Gln Ala Phe Arg Ala Ala Val Ala Thr</div> <div>180 185 190</div> </div>																	
<div> <div>Thr Arg Gly Asp Gln Glu Ser Ala Glu Ala Asn Lys Phe Gln Val Thr</div> <div>195 200 205</div> </div>																	
<div> <div>Asp Ser Ala Ala Phe Asn Ala Leu Val Thr Phe Cys Ile Arg Asp Leu</div> </div>																	

210	215	220
Ile Gly Cys Leu Gln Lys	Leu Leu Phe Gly Lys Val	Ala Lys Asp Ser
225	230	235
Ser Arg Met Leu Gln Pro	Ser Ser Ser Pro Leu Trp	Gly Lys Leu Arg
245	250	255
Val Asp Ile Lys Ala Tyr	Leu Gly Ser Ala Ile Gln	Leu Val Ser Cys
260	265	270
Leu Ser Glu Thr Thr Val	Leu Ala Ala Val Leu Arg	His Ile Ser Val
275	280	285
Leu Val Pro Cys Phe Leu	Thr Phe Pro Lys Gln Cys	Arg Met Leu Leu
290	295	300
Lys Arg Met Val Val Val	Trp Ser Thr Gly Glu Glu	Ser Leu Arg Val
305	310	315
Leu Ala Phe Leu Val Leu	Ser Arg Val Cys Arg His	Lys Lys Asp Thr
325	330	335
Phe Leu Gly Pro Val Leu	Lys Gln Met Tyr Ile Thr	Tyr Val Arg Asn
340	345	350
Cys Lys Phe Thr Ser Pro	Gly Ala Leu Pro Phe Ile	Ser Phe Met Gln
355	360	365
Trp Thr Leu Thr Glu Leu	Leu Ala Leu Glu Pro Gly	Val Ala Tyr Gln
370	375	380
His Ala Phe Leu Tyr Ile	Arg Gln Leu Ala Ile His	Leu Arg Asn Ala
385	390	395
Met Thr Thr Arg Lys Lys	Glu Thr Tyr Gln Ser Val	Tyr Asn Trp Gln
405	410	415
Tyr Val His Cys Leu Phe	Leu Trp Cys Arg Val Leu	Ser Thr Ala Gly
420	425	430
Pro Ser Glu Ala Leu Gln	Pro Leu Val Tyr Pro Leu	Ala Gln Val Ile
435	440	445
Ile Gly Cys Ile Lys Leu	Ile Pro Thr Ala Arg Phe	Tyr Pro Leu Arg
450	455	460
Met His Cys Ile Arg Ala	Leu Thr Leu Leu Ser Gly	Ser Ser Gly Ala
465	470	475
Phe Ile Pro Val Leu Pro	Phe Ile Leu Glu Met Phe	Gln Gln Val Asp
485	490	495
Phe Asn Arg Lys Pro Gly	Arg Met Ser Ser Lys Pro	Ile Asn Phe Ser
500	505	510
Val Ile Leu Lys Leu Ser	Asn Val Asn Leu Gln Glu	Lys Ala Tyr Arg
515	520	525
Asp Gly Leu Val Glu Gln	Leu Tyr Asp Leu Thr Leu	Glu Tyr Leu His
530	535	540
Ser Gln Ala His Cys Ile	Gly Phe Pro Glu Leu Val	Leu Pro Val Val
545	550	555
Leu Gln Leu Lys Ser Phe	Leu Arg Glu Cys Lys Val	Ala Asn Tyr Cys
565	570	575
Arg Gln Val Gln Gln Leu	Leu Gly Lys Val Gln Glu	Asn Ser Ala Tyr
580	585	590
Ile Cys Ser Arg Arg Gln	Arg Val Ser Phe Gly Val	Ser Glu Gln Gln
595	600	605
Ala Val Glu Ala Trp Glu	Lys Leu Thr Arg Glu Glu	Gly Thr Pro Leu
610	615	620
Thr Leu Tyr Tyr Ser His	Trp Arg Lys Leu Arg Asp	Arg Glu Ile Gln
625	630	635
Leu Glu Ile Ser Gly Lys	Glu Arg Leu Glu Asp Leu	Asn Phe Pro Glu
645	650	655
Ile Lys Arg Arg Lys Met	Ala Asp Arg Lys Asp Glu	Asp Arg Lys Gln
660	665	670
Phe Lys Asp Leu Phe Asp	Leu Asn Ser Ser Glu Glu	Asp Asp Thr Glu
675	680	685
Gly Phe Ser Glu Arg Gly	Ile Leu Arg Pro Leu Ser	Thr Arg His Gly
690	695	700
Val Glu Asp Asp Glu Glu	Asp Glu Glu Glu Gly Glu	Glu Asp Ser Ser
705	710	715
Asn Ser Glu Asp Gly Asp	Pro Asp Ala Glu Ala Gly	Leu Ala Pro Gly

				725					730					735	
Glu	Leu	Gln	Gln	Leu	Ala	Gln	Gly	Pro	Glu	Asp	Glu	Leu	Glu	Asp	Leu
			740					745					750		
Gln	Leu	Ser	Glu	Asp	Asp										
		755			758										

<210> 3050
 <211> 229
 <212> PRT
 <213> Homo sapiens

<400> 3050

His	Leu	Asp	Arg	Tyr	Ile	Lys	Ser	Pro	Gly	Ser	Gly	Ser	Ser	Thr	Pro
1				5					10					15	
Ala	Pro	Pro	Ser	His	Leu	Leu	Leu	Tyr	Leu	Leu	His	Pro	Gln	Ser	Thr
			20					25					30		
Arg	Thr	Met	Gly	Cys	Cys	Gly	Cys	Ser	Arg	Gly	Cys	Gly	Ser	Gly	Cys
		35					40					45			
Gly	Gly	Cys	Gly	Ser	Ser	Cys	Gly	Gly	Cys	Gly	Ser	Gly	Cys	Gly	Gly
	50					55					60				
Cys	Gly	Ser	Gly	Arg	Gly	Gly	Cys	Gly	Ser	Gly	Cys	Gly	Gly	Cys	Ser
	65				70				75					80	
Ser	Ser	Cys	Gly	Gly	Cys	Gly	Ser	Arg	Cys	Tyr	Val	Pro	Val	Cys	Cys
				85				90						95	
Cys	Lys	Pro	Val	Cys	Ser	Trp	Val	Pro	Ala	Cys	Ser	Cys	Thr	Ser	Cys
			100					105					110		
Gly	Ser	Cys	Gly	Gly	Ser	Lys	Gly	Gly	Cys	Gly	Ser	Cys	Gly	Gly	Ser
	115					120						125			
Lys	Gly	Gly	Cys	Gly	Ser	Cys	Gly	Cys	Ser	Gln	Ser	Ser	Cys	Cys	Lys
	130					135				140					
Pro	Cys	Cys	Cys	Ser	Ser	Gly	Cys	Gly	Ser	Ser	Cys	Ser	Gln	Ser	Ser
	145				150					155				160	
Cys	Cys	Lys	Pro	Cys	Cys	Cys	Ser	Ser	Gly	Cys	Gly	Ser	Ser	Cys	Cys
				165					170					175	
Gln	Ser	Ser	Cys	Cys	Lys	Pro	Tyr	Cys	Cys	Gln	Ser	Ser	Cys	Cys	Lys
			180					185					190		
Pro	Cys	Ser	Cys	Phe	Ser	Gly	Cys	Gly	Ser	Ser	Cys	Cys	Gln	Ser	Ser
	195					200						205			
Cys	Tyr	Lys	Pro	Cys	Cys	Cys	Gln	Ser	Ser	Cys	Cys	Val	Pro	Val	Cys
	210					215						220			
Cys	Gln	Cys	Lys	Ile											
	225			229											

<210> 3051
 <211> 1385
 <212> PRT
 <213> Homo sapiens

<400> 3051

Asn	Ile	Pro	Arg	Trp	Asn	Phe	Gln	Gly	Lys	Ser	Phe	Gly	Val	Val	Leu
1				5					10					15	
Val	His	Phe	Ser	Ser	Glu	Glu	Val	Asp	Met	Ala	Ser	Asp	Ser	Pro	Ala
			20					25					30		
Arg	Ser	Leu	Asp	Glu	Ile	Asp	Leu	Ser	Ala	Leu	Arg	Asp	Pro	Ala	Gly
		35				40						45			
Ile	Phe	Glu	Leu	Val	Glu	Leu	Val	Gly	Asn	Gly	Thr	Tyr	Gly	Gln	Val
	50					55					60				
Tyr	Lys	Gly	Arg	His	Val	Lys	Thr	Gly	Gln	Leu	Ala	Ala	Ile	Lys	Val

65	70	75	80
Met Asp Val Thr	Gly Asp Glu Glu Glu Glu Ile Lys Gln Glu Ile Asn		
	85	90	95
Met Leu Lys Lys	Tyr Ser His His Arg Asn Ile Ala Thr Tyr Tyr Gly		
	100	105	110
Ala Phe Ile Lys	Lys Asn Pro Pro Gly Met Asp Asp Gln Leu Trp Leu		
	115	120	125
Val Met Glu Phe	Cys Gly Ala Gly Ser Val Thr Asp Leu Ile Lys Asn		
	130	135	140
Thr Lys Gly Tyr	Thr Leu Lys Glu Glu Trp Ile Ala Tyr Ile Cys Arg		
	145	150	155
Glu Ile Leu Arg	Gly Leu Ser His Leu His Gln His Lys Val Ile His		
	165	170	175
Arg Asp Ile Lys	Gly Gln Asn Val Leu Leu Thr Glu Asn Ala Glu Val		
	180	185	190
Lys Leu Val Asp	Phe Gly Val Ser Ala Gln Leu Asp Arg Thr Val Gly		
	195	200	205
Arg Arg Asn Thr	Phe Ile Gly Thr Pro Tyr Trp Met Ala Pro Glu Val		
	210	215	220
Ile Ala Cys Asp	Glu Asn Pro Asp Ala Thr Tyr Asp Phe Lys Ser Asp		
	225	230	235
Leu Trp Ser Leu	Gly Ile Thr Ala Ile Glu Met Ala Glu Gly Ala Pro		
	245	250	255
Pro Leu Cys Asp	Met His Pro Met Arg Ala Leu Phe Leu Ile Pro Arg		
	260	265	270
Asn Pro Ala Pro	Arg Leu Lys Ser Lys Lys Trp Ser Lys Lys Phe Gln		
	275	280	285
Ser Phe Ile Glu	Ser Cys Leu Val Lys Asn His Ser Gln Arg Pro Ala		
	290	295	300
Thr Glu Gln Leu	Met Lys His Pro Phe Ile Arg Asp Gln Pro Asn Glu		
	305	310	315
Arg Gln Val Arg	Ile Gln Leu Lys Asp His Ile Asp Arg Thr Lys Lys		
	325	330	335
Lys Arg Gly Glu	Lys Asp Glu Thr Glu Tyr Glu Tyr Ser Gly Ser Glu		
	340	345	350
Glu Glu Glu Glu	Glu Asn Asp Ser Gly Glu Pro Ser Ser Ile Leu Asn		
	355	360	365
Leu Pro Gly Glu	Ser Thr Leu Arg Arg Asp Phe Leu Arg Leu Gln Leu		
	370	375	380
Ala Asn Lys Glu	Arg Ser Glu Ala Leu Arg Arg Gln Gln Leu Glu Gln		
	385	390	395
Gln Gln Arg Glu	Asn Glu Glu His Lys Arg Gln Leu Leu Ala Glu Arg		
	405	410	415
Gln Lys Arg Ile	Glu Glu Gln Lys Glu Gln Arg Arg Arg Leu Glu Glu		
	420	425	430
Gln Gln Arg Arg	Glu Lys Glu Leu Arg Lys Gln Gln Glu Arg Glu Gln		
	435	440	445
Arg Arg His Tyr	Glu Glu Gln Met Arg Arg Glu Glu Glu Arg Arg Arg		
	450	455	460
Ala Glu His Glu	Gln Glu Tyr Ile Arg Arg Gln Leu Glu Glu Glu Gln		
	465	470	475
Arg Gln Leu Glu	Ile Leu Gln Gln Gln Leu Leu His Glu Gln Ala Leu		
	485	490	495
Leu Leu Glu Tyr	Lys Arg Lys Gln Leu Glu Glu Gln Arg Gln Ala Glu		
	500	505	510
Arg Leu Gln Arg	Gln Leu Lys Gln Glu Arg Asp Tyr Leu Val Ser Leu		
	515	520	525
Gln His Gln Arg	Gln Glu Gln Arg Pro Val Glu Lys Lys Pro Leu Tyr		
	530	535	540
His Tyr Lys Glu	Gly Met Ser Pro Ser Glu Lys Pro Ala Trp Ala Lys		
	545	550	555
Glu Val Glu Glu	Arg Ser Arg Leu Asn Arg Gln Ser Ser Pro Ala Met		
	565	570	575
Pro His Lys Val	Ala Asn Arg Ile Ser Asp Pro Asn Leu Pro Pro Arg		

4723

1090 1095 1100
 Tyr Asn Leu Ile Asn Arg Arg Arg Phe Gln Gln Met Asp Val Leu Glu
 1105 1110 1115 1120
 Gly Leu Asn Val Leu Val Thr Ile Ser Gly Lys Lys Asn Lys Leu Arg
 1125 1130 1135
 Val Tyr Tyr Leu Ser Trp Leu Arg Asn Arg Ile Leu His Asn Asp Pro
 1140 1145 1150
 Glu Val Glu Lys Lys Gln Gly Trp Ile Thr Val Gly Asp Leu Glu Gly
 1155 1160 1165
 Cys Ile His Tyr Lys Val Val Lys Tyr Glu Arg Ile Lys Phe Leu Val
 1170 1175 1180
 Ile Ala Leu Lys Asn Ala Val Glu Ile Tyr Ala Trp Ala Pro Lys Pro
 1185 1190 1195 1200
 Tyr His Lys Phe Met Ala Phe Lys Ser Phe Ala Asp Leu Gln His Lys
 1205 1210 1215
 Pro Leu Leu Val Asp Leu Thr Val Glu Glu Gly Gln Arg Leu Lys Val
 1220 1225 1230
 Ile Phe Gly Ser His Thr Gly Phe His Val Ile Asp Val Asp Ser Gly
 1235 1240 1245
 Asn Ser Tyr Asp Ile Tyr Ile Pro Ser His Ile Gln Gly Asn Ile Thr
 1250 1255 1260
 Pro His Ala Ile Val Ile Leu Pro Lys Thr Asp Gly Met Glu Met Leu
 1265 1270 1275 1280
 Val Cys Tyr Glu Asp Glu Gly Val Tyr Val Asn Thr Tyr Gly Arg Ile
 1285 1290 1295
 Thr Lys Asp Val Val Leu Gln Trp Gly Glu Met Pro Thr Ser Val Ala
 1300 1305 1310
 Tyr Ile His Ser Asn Gln Ile Met Gly Trp Gly Glu Lys Ala Ile Glu
 1315 1320 1325
 Ile Arg Ser Val Glu Thr Gly His Leu Asp Gly Val Phe Met His Lys
 1330 1335 1340
 Arg Ala Gln Arg Leu Lys Phe Leu Cys Glu Arg Asn Asp Lys Val Phe
 1345 1350 1355 1360
 Phe Ala Ser Val Arg Ser Gly Gly Ser Ser Gln Val Phe Phe Met Thr
 1365 1370 1375
 Leu Asn Arg Asn Ser Met Met Asn Trp
 1380 1385

<210> 3052
 <211> 205
 <212> PRT
 <213> Homo sapiens

<400> 3052
 Met Gly Gln Val Glu Cys Gly Gly Gln Lys Leu Gly Asn Gln Leu Glu
 1 5 10 15
 Asp Asp Ser Glu Pro Ala Glu Gly Lys Val Tyr Ser Ser Asp Glu Glu
 20 25 30
 Lys Leu Glu Ala Ser Ala Gly Asp Pro Ala Gly Ser Glu Gln Glu Glu
 35 40 45
 Glu Gly Ser Gly Gly Asp Ser Glu Asp Asp Gly Phe Leu Asp Ser Ser
 50 55 60
 Ala Gly Gly Pro Gly Ala Leu Leu Gly Pro Lys Pro Lys Leu Lys Gly
 65 70 75 80
 Ser Leu Gly Thr Gly Ala Glu Glu Gly Ala Pro Val Thr Ala Gly Val
 85 90 95
 Thr Ala Pro Gly Gly Lys Ser Arg Arg Arg Arg Thr Ala Phe Thr Ser
 100 105 110
 Glu Gln Leu Leu Glu Leu Glu Lys Glu Phe His Cys Lys Lys Tyr Leu
 115 120 125
 Ser Leu Thr Glu Arg Ser Gln Ile Ala His Ala Leu Lys Leu Ser Glu

130						135						140			
Val	Gln	Val	Lys	Ile	Trp	Phe	Gln	Asn	Arg	Arg	Ala	Lys	Trp	Lys	Arg
145						150					155				160
Ile	Lys	Ala	Gly	Asn	Val	Ser	Ser	Arg	Ser	Gly	Glu	Pro	Val	Arg	Asn
				165					170						175
Pro	Lys	Ile	Val	Val	Pro	Ile	Pro	Val	His	Val	Asn	Arg	Phe	Ala	Val
			180					185							190
Arg	Ser	Gln	His	Gln	Gln	Met	Glu	Gln	Gly	Ala	Arg	Pro			
		195					200					205			

<210> 3053

<211> 654

<212> PRT

<213> Homo sapiens

<400> 3053

Phe	Gly	Val	Arg	Val	Pro	Ser	Asn	Thr	Gln	Cys	Leu	Val	Pro	Ser	Phe
1				5					10					15	
His	Cys	Met	Gln	Thr	Ser	Glu	Trp	Asp	Ser	Glu	Cys	Leu	Thr	Ser	Leu
		20						25					30		
Gln	Pro	Leu	Pro	Leu	Pro	Thr	Pro	Pro	Ala	Ala	Asn	Glu	Ala	His	Leu
		35				40						45			
Gln	Thr	Ala	Ala	Ile	Ser	Leu	Trp	Thr	Val	Val	Ala	Ala	Val	Gln	Ala
	50					55					60				
Ile	Glu	Arg	Lys	Val	Glu	Ile	His	Ser	Arg	Arg	Leu	Leu	His	Leu	Glu
	65				70					75					80
Gly	Arg	Thr	Gly	Thr	Ala	Glu	Lys	Lys	Leu	Ala	Ser	Cys	Glu	Lys	Thr
			85					90						95	
Val	Thr	Glu	Leu	Gly	Asn	Gln	Leu	Glu	Gly	Lys	Gly	Ala	Val	Leu	Gly
		100						105					110		
Thr	Leu	Leu	Gln	Glu	Tyr	Gly	Leu	Leu	Gln	Arg	Arg	Leu	Glu	Asn	Leu
	115					120						125			
Glu	Asn	Leu	Leu	Arg	Asn	Arg	Phe	Trp	Ile	Leu	Arg	Leu	Pro	Pro	
	130				135					140					
Gly	Ile	Lys	Gly	Asp	Ile	Pro	Lys	Val	Pro	Val	Ala	Phe	Asp	Asp	Val
	145				150					155					160
Ser	Ile	Tyr	Phe	Ser	Thr	Pro	Glu	Trp	Glu	Lys	Leu	Glu	Glu	Trp	Gln
			165					170						175	
Lys	Glu	Leu	Tyr	Lys	Asn	Ile	Met	Lys	Gly	Asn	Tyr	Glu	Ser	Leu	Ile
		180						185					190		
Ser	Met	Asp	Tyr	Ala	Ile	Asn	Gln	Pro	Asp	Val	Leu	Ser	Gln	Ile	Gln
	195					200					205				
Pro	Glu	Gly	Glu	His	Asn	Thr	Glu	Asp	Gln	Ala	Gly	Pro	Glu	Glu	Ser
	210					215					220				
Glu	Ile	Pro	Thr	Asp	Pro	Ser	Glu	Glu	Pro	Gly	Ile	Ser	Thr	Ser	Asp
	225				230					235					240
Ile	Leu	Ser	Trp	Ile	Lys	Gln	Glu	Glu	Glu	Pro	Gln	Val	Gly	Ala	Pro
			245					250						255	
Pro	Glu	Ser	Lys	Glu	Ser	Asp	Val	Tyr	Lys	Ser	Thr	Tyr	Ala	Asp	Glu
		260						265					270		
Glu	Leu	Val	Ile	Lys	Ala	Glu	Gly	Leu	Ala	Arg	Ser	Ser	Leu	Cys	Pro
	275					280						285			
Glu	Val	Pro	Val	Pro	Phe	Ser	Ser	Pro	Pro	Ala	Ala	Ala	Lys	Asp	Ala
	290					295					300				
Phe	Ser	Asp	Val	Ala	Phe	Lys	Ser	Gln	Gln	Ser	Thr	Ser	Met	Thr	Pro
	305				310					315					320
Phe	Gly	Arg	Pro	Ala	Thr	Asp	Leu	Pro	Glu	Ala	Ser	Glu	Gly	Gln	Val
			325						330					335	
Thr	Phe	Thr	Gln	Leu	Gly	Ser	Tyr	Pro	Leu	Pro	Pro	Pro	Val	Gly	Glu
		340						345					350		
Gln	Val	Phe	Ser	Cys	His	His	Cys	Gly	Lys	Asn	Leu	Ser	Gln	Asp	Met

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<210> 3054
<211> 736
<212> PRT
<213> Homo sapiens
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4726

130					135					140					
Phe	Gln	Arg	Pro	Leu	Thr	Gly	Ile	Gly	Leu	Asn	Thr	Val	Arg	Phe	Thr
145					150					155					160
Ser	Glu	Phe	Pro	Leu	His	Ser	Lys	Asp	Pro	Thr	Ala	His	Lys	Leu	Leu
				165						170					175
Phe	Thr	Gly	Asn	Tyr	Leu	Cys	Lys	Leu	His	Pro	Arg	Pro	Arg	His	Ala
			180						185						190
Pro	Gln	Gly	Ser	Leu	Ser	Asp	Phe	Cys	His	Gly	Thr	Glu	Gly	Lys	Asp
		195					200					205			
Leu	Pro	Ser	Glu	His	Asn	Val	Ser	Val	Glu	Gly	Val	Ala	Gln	Asp	Arg
	210				215						220				
Ser	Pro	Glu	Ala	Thr	Leu	Cys	Pro	Gln	Lys	Thr	Cys	Pro	Cys	Asp	Ile
225					230					235					240
Cys	Gly	Leu	Arg	Leu	Lys	Asp	Ile	Leu	His	Leu	Ala	Glu	His	Gln	Thr
				245					250						255
Thr	His	Pro	Arg	Gln	Lys	Pro	Phe	Val	Cys	Glu	Ala	Tyr	Val	Lys	Gly
			260					265					270		
Ser	Glu	Phe	Ser	Ala	Asn	Leu	Pro	Arg	Lys	Gln	Val	Gln	Gln	Asn	Val
	275						280					285			
His	Asn	Pro	Ile	Arg	Thr	Glu	Glu	Gly	Gln	Ala	Ser	Pro	Val	Lys	Thr
	290				295						300				
Cys	Arg	Asp	His	Thr	Ser	Asp	Gln	Leu	Ser	Thr	Cys	Arg	Glu	Gly	Gly
305					310					315					320
Lys	Asp	Phe	Val	Ala	Thr	Ala	Gly	Phe	Leu	Gln	Cys	Glu	Val	Thr	Pro
				325					330						335
Ser	Asp	Gly	Glu	Pro	His	Glu	Ala	Thr	Glu	Gly	Val	Val	Asp	Phe	His
		340						345					350		
Ile	Ala	Leu	Arg	His	Asn	Lys	Cys	Cys	Glu	Ser	Gly	Asp	Ala	Phe	Asn
	355					360						365			
Asn	Lys	Ser	Thr	Leu	Val	Gln	His	Gln	Arg	Ile	His	Ser	Arg	Glu	Arg
	370				375						380				
Pro	Tyr	Glu	Cys	Ser	Lys	Cys	Gly	Ile	Phe	Phe	Thr	Tyr	Ala	Ala	Asp
385					390					395					400
Leu	Thr	Gln	His	Gln	Lys	Val	His	Asn	Arg	Gly	Lys	Pro	Tyr	Glu	Cys
				405					410						415
Cys	Glu	Cys	Gly	Lys	Phe	Phe	Ser	Gln	His	Ser	Ser	Leu	Val	Lys	His
		420						425					430		
Arg	Arg	Val	His	Thr	Gly	Glu	Ser	Pro	His	Val	Cys	Gly	Asp	Cys	Gly
		435					440					445			
Lys	Phe	Phe	Ser	Arg	Ser	Ser	Asn	Leu	Ile	Gln	His	Lys	Arg	Val	His
	450					455					460				
Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Ser	Asp	Cys	Gly	Lys	Phe	Phe	Ser
465					470					475					480
Gln	Arg	Ser	Asn	Leu	Ile	His	His	Lys	Arg	Val	His	Thr	Gly	Arg	Ser
				485					490						495
Ala	His	Glu	Cys	Ser	Glu	Cys	Gly	Lys	Ser	Phe	Asn	Cys	Asn	Ser	Ser
			500					505					510		
Leu	Ile	Lys	His	Trp	Arg	Val	His	Thr	Gly	Glu	Arg	Pro	Tyr	Lys	Cys
	515						520					525			
Asn	Glu	Cys	Gly	Lys	Phe	Phe	Ser	His	Ile	Ala	Ser	Leu	Ile	Gln	His
	530					535					540				
Gln	Ile	Val	His	Thr	Gly	Glu	Arg	Pro	His	Gly	Cys	Gly	Glu	Cys	Gly
545					550					555					560
Lys	Ala	Phe	Ile	Arg	Ser	Ser	Asp	Leu	Met	Lys	His	Gln	Arg	Val	His
				565					570						575
Thr	Gly	Glu	Arg	Pro	Tyr	Glu	Cys	Asn	Glu	Cys	Gly	Lys	Leu	Phe	Ser
			580					585					590		
Gln	Ser	Ser	Ser	Leu	Asn	Ser	His	Arg	Arg	Leu	His	Thr	Gly	Glu	Arg
		595					600					605			
Pro	Tyr	Gln	Cys	Ser	Glu	Cys	Gly	Lys	Phe	Phe	Asn	Gln	Ser	Ser	Ser
	610					615					620				
Leu	Asn	Asn	His	Arg	Arg	Leu	His	Thr	Gly	Glu	Arg	Pro	Tyr	Glu	Cys
625					630					635					640
Ser	Glu	Cys	Gly	Lys	Thr	Phe	Arg	Gln	Arg	Ser	Asn	Leu	Arg	Gln	His

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<210> 3055
<211> 895
<212> PRT
<213> Homo sapiens
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4728

4729


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<210> 3056
<211> 54
<212> PRT
<213> Homo sapiens
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```
<210> 3057
<211> 54
<212> PRT
<213> Homo sapiens
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<210> 3058
<211> 279
<212> PRT
<213> Homo sapiens
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4730

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<210> 3059
<211> 170
<212> PRT
<213> Homo sapiens
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```
<210> 3060
<211> 67
<212> PRT
<213> Homo sapiens
```

<400> 3060

```

Pro Pro Leu Gln Leu Asp Met Asp Pro Asn Cys Tyr Cys Ala Asp Gly
 1           5           10           15
Asp Ser Cys Thr Cys Ala Gly Ser Cys Lys Cys Lys Glu Cys Lys Cys
      20           25           30
Thr Ser Cys Lys Lys Ser Cys Cys Ser Cys Cys Pro Ala Gly Cys Ala
      35           40           45
Lys Cys Ala Gln Gly Cys Ile Cys Lys Gly Ala Thr Asp Lys Cys Ser
      50           55           60
Cys Cys Ala
65           67

```

<210> 3061

<211> 97

<212> PRT

<213> Homo sapiens

<400> 3061

```

Val Arg Arg Asp Val Arg Gln Gln Ala Thr Trp Ala Met Ala Ser Asp
 1           5           10           15
Leu Asp Phe Ser Pro Pro Glu Val Pro Glu Pro Thr Phe Leu Glu Asn
      20           25           30
Leu Leu Arg Tyr Gly Leu Phe Leu Gly Ala Ile Phe Gln Leu Ile Cys
      35           40           45
Val Leu Ala Ile Ile Val Pro Ile Pro Lys Ser His Glu Ala Glu Ala
      50           55           60
Glu Pro Ser Glu Pro Arg Ser Ala Glu Val Thr Arg Lys Pro Lys Ala
      65           70           75           80
Ala Val Pro Ser Val Asn Lys Arg Pro Lys Lys Glu Thr Lys Lys Lys
      85           90           95
Arg
97

```

<210> 3062

<211> 437

<212> PRT

<213> Homo sapiens

<400> 3062

```

Trp Lys Gln Lys Tyr Glu Pro Leu Gly Leu Asp Ala Ala Gly Ile Glu
 1           5           10           15
Glu Ala Ile Thr Ala Val Gly Ser Phe Ile Leu Lys Ala Asn Glu Leu
      20           25           30
Leu Gln Val Ile Asp Ser Ser Met Lys Asn Phe Lys Ala Phe Phe Arg
      35           40           45
Trp Leu Tyr Val Ala Met Leu Arg Met Thr Glu Asp His Val Leu Pro
      50           55           60
Glu Leu Asn Lys Met Thr Gln Lys Asp Ile Thr Phe Val Ala Glu Phe
      65           70           75           80
Leu Thr Glu His Phe Asn Glu Ala Pro Asp Leu Tyr Asn Arg Lys Gly
      85           90           95
Lys Tyr Phe Asn Val Glu Arg Val Gly Gln Tyr Leu Lys Asp Glu Asp
      100           105           110
Asp Asp Leu Val Ser Pro Pro Asn Thr Glu Gly Asn Gln Trp Tyr Asp
      115           120           125
Phe Leu Gln Asn Ser Ser His Leu Lys Glu Ser Pro Leu Leu Phe Pro

```

```
<210> 3063
<211> 266
<212> PRT
<213> Homo sapiens
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4733

115	120	125
Thr Thr Val Val Ser Thr Leu Leu Ser Phe Leu Arg Pro Thr Val Asn		
130	135	140
Ala Tyr Ala Leu Asn Ser Ile Ala Leu His Ile Leu Tyr Ile Val Cys		
145	150	155
Gln Glu Tyr Arg Lys Thr Ser Asn Lys Glu Leu Arg His Leu Ile Glu		
165	170	175
Val Ser Val Val Leu Trp Ala Val Ala Leu Thr Ser Trp Ile Ser Asp		
180	185	190
Arg Leu Leu Cys Ser Phe Trp Gln Arg Ile His Phe Phe Tyr Leu His		
195	200	205
Ser Ile Trp His Val Leu Ile Ser Ile Thr Phe Pro Tyr Gly Met Val		
210	215	220
Thr Met Ala Leu Val Asp Ala Asn Tyr Glu Met Pro Gly Glu Thr Leu		
225	230	235
Lys Val Arg Tyr Trp Pro Arg Asp Ser Trp Pro Val Gly Leu Pro Tyr		
245	250	255
Val Glu Ile Arg Gly Asp Asp Lys Asp Cys		
260	265	266

<210> 3064
 <211> 199
 <212> PRT
 <213> Homo sapiens

<400> 3064

Ala Ala Thr Met Ala Asp Gly Gln Met Pro Phe Ser Cys His Tyr Pro	
1 5 10 15	
Ser Arg Leu Arg Arg Asp Pro Phe Arg Asp Ser Pro Leu Ser Ser Arg	
20 25 30	
Leu Leu Asp Asp Gly Phe Gly Met Asp Pro Phe Pro Asp Asp Leu Thr	
35 40 45	
Ala Ser Trp Pro Asp Trp Ala Leu Pro Arg Leu Ser Ser Ala Trp Pro	
50 55 60	
Gly Thr Leu Arg Ser Gly Met Val Pro Arg Gly Pro Thr Ala Thr Ala	
65 70 75 80	
Arg Phe Gly Val Pro Ala Glu Gly Arg Thr Pro Pro Pro Phe Pro Gly	
85 90 95	
Glu Pro Trp Lys Val Cys Val Asn Val His Ser Phe Lys Pro Glu Glu	
100 105 110	
Leu Met Val Lys Thr Lys Asp Gly Tyr Val Glu Val Ser Gly Lys His	
115 120 125	
Glu Glu Lys Gln Gln Glu Gly Gly Ile Val Ser Lys Asn Phe Thr Lys	
130 135 140	
Lys Ile Gln Leu Pro Ala Glu Val Asp Pro Val Thr Val Phe Ala Ser	
145 150 155 160	
Leu Ser Pro Glu Gly Leu Leu Ile Ile Glu Ala Pro Gln Val Pro Pro	
165 170 175	
Tyr Ser Thr Phe Gly Glu Ser Ser Phe Asn Asn Glu Leu Pro Gln Asp	
180 185 190	
Ser Gln Glu Val Thr Cys Thr	
195 199	

<210> 3065
 <211> 899
 <212> PRT
 <213> Homo sapiens

<400> 3065

```

Leu Ser Thr Ser Leu Thr Gly Ser His Leu Phe Ser Leu Gly Asn His
 1          5          10          15
Ser Thr Arg Glu Asn Leu Asn Ala Gly Asn Phe Asn Phe Pro Ser Glu
          20          25          30
Gly His Leu Val Arg Ser Thr Gly Pro Gly Gly Ser Phe Ala Lys His
          35          40          45
Met Val Ala Gln Cys Val Ser Pro Lys Gly Pro Leu Ala Cys Ser Arg
          50          55          60
Thr Tyr Phe Phe Gly Ala Thr His Val Pro Tyr Leu Gly Gly Asp Ser
          65          70          75          80
Lys Leu Pro Lys Lys Thr Glu Gln Ile Arg Leu Leu Ser Gln Ile Tyr
          85          90          95
Ala Ala Val Ile Glu Ala Val Leu Ala Gly Ile Ala Cys Tyr Ala Lys
          100          105          110
Thr Ser Ser Leu Thr Lys Ala Lys Glu Val Ala Glu Gln Thr Leu Gly
          115          120          125
Ser Gly Leu Asp Ser Phe Glu Leu Ile Pro Phe Lys Ala Ala Leu Arg
          130          135          140
Ser Lys Met Thr Phe His Ile His Ala Val Asn Asn Gln Gly Arg Ile
          145          150          155          160
Val Pro Leu Asp Ser Glu Asp Ser Leu Ser Phe Val Lys Thr Ala Cys
          165          170          175
Met Ala Val Tyr Asp Ile Pro Asp Leu Leu Gly Gly Asn Gly Cys Leu
          180          185          190
Gly Ser Val Val Phe Ser Glu Ser Phe Leu Thr Ser Gln Ile Leu Val
          195          200          205
Lys Glu Lys Asp Gly Thr Val Thr Thr Glu Thr Ser Ser Val Val Leu
          210          215          220
Thr Ala Ala Val Pro Arg Phe Cys Ser Trp Leu Val Glu Asp Asn Glu
          225          230          235          240
Val Lys Leu Ser Glu Lys Thr His Gln Ala Val Arg Gly Asp Glu Ser
          245          250          255
Phe Leu Gly Thr Tyr Leu Thr Gly Gly Glu Gly Ala Tyr Leu Tyr Ser
          260          265          270
Ser Asn Leu Gln Ser Trp Pro Glu Glu Gly Asn Val His Phe Phe Ser
          275          280          285
Ser Gly Leu Leu Phe Ser His Cys Arg His Gly Ser Ile Ile Ile Ser
          290          295          300
Lys Asp His Met Asn Ser Ile Ser Phe Tyr Asp Gly Asp Ser Thr Ser
          305          310          315          320
Thr Val Ala Ala Leu Leu Ile Asp Phe Lys Ser Ser Leu Leu Pro His
          325          330          335
Leu Pro Val His Phe His Gly Ser Ser Asn Phe Leu Met Ile Ala Leu
          340          345          350
Phe Pro Lys Ser Lys Ile Tyr Gln Ala Phe Tyr Ser Glu Val Phe Ser
          355          360          365
Leu Trp Lys Gln Gln Asp Asn Ser Gly Ile Ser Leu Lys Val Ile Gln
          370          375          380
Glu Asp Gly Leu Ser Val Glu Gln Lys Arg Leu His Ser Ser Ala Gln
          385          390          395          400
Lys Leu Phe Ser Ala Leu Ser Gln Pro Ala Gly Glu Lys Arg Ser Ser
          405          410          415
Leu Lys Leu Leu Ser Ala Lys Leu Pro Glu Leu Asp Trp Phe Leu Gln
          420          425          430
His Phe Ala Ile Ser Ser Ile Ser Gln Glu Pro Val Met Arg Thr His
          435          440          445
Leu Pro Val Leu Leu Gln Gln Ala Glu Ile Asn Thr Thr His Arg Ile
          450          455          460
Glu Ser Asp Lys Val Ile Ile Ser Ile Val Thr Gly Leu Pro Gly Cys
          465          470          475          480
His Ala Ser Glu Leu Cys Ala Phe Leu Val Thr Leu His Lys Glu Cys
          485          490          495
Gly Arg Trp Met Val Tyr Arg Gln Ile Met Asp Ser Ser Glu Cys Phe

```

		500					505				510				
His	Ala	Ala	His	Phe	Gln	Arg	Tyr	Leu	Ser	Ser	Ala	Leu	Glu	Ala	Gln
		515					520					525			
Gln	Asn	Arg	Ser	Ala	Arg	Gln	Ser	Ala	Tyr	Ile	Arg	Lys	Lys	Thr	Arg
		530					535					540			
Leu	Leu	Val	Val	Leu	Gln	Gly	Tyr	Thr	Asp	Val	Ile	Asp	Val	Val	Gln
545					550					555					560
Ala	Leu	Gln	Thr	His	Pro	Asp	Ser	Asn	Val	Lys	Ala	Ser	Phe	Thr	Ile
				565					570					575	
Gly	Ala	Ile	Thr	Ala	Cys	Val	Glu	Pro	Met	Ser	Cys	Tyr	Met	Glu	His
			580					585					590		
Arg	Phe	Leu	Phe	Pro	Lys	Cys	Leu	Asp	Gln	Cys	Ser	Gln	Gly	Leu	Val
		595					600					605			
Ser	Asn	Val	Val	Phe	Thr	Ser	His	Thr	Thr	Glu	Gln	Arg	His	Pro	Leu
		610					615					620			
Leu	Val	Gln	Leu	Gln	Ser	Leu	Ile	Arg	Ala	Ala	Asn	Pro	Ala	Ala	Ala
625					630					635					640
Phe	Ile	Leu	Ala	Glu	Asn	Gly	Ile	Val	Thr	Arg	Asn	Glu	Asp	Ile	Glu
				645					650				655		
Leu	Ile	Leu	Ser	Glu	Asn	Ser	Phe	Ser	Ser	Pro	Glu	Met	Leu	Arg	Ser
			660					665					670		
Arg	Tyr	Leu	Met	Tyr	Pro	Gly	Trp	Tyr	Glu	Gly	Lys	Leu	Asn	Ala	Gly
		675					680					685			
Ser	Val	Tyr	Pro	Leu	Met	Val	Gln	Ile	Cys	Val	Trp	Phe	Gly	Arg	Pro
		690				695					700				
Leu	Glu	Lys	Thr	Arg	Phe	Val	Ala	Lys	Cys	Lys	Ala	Ile	Gln	Ser	Ser
705					710					715					720
Ile	Lys	Pro	Ser	Pro	Phe	Ser	Gly	Asn	Ile	Tyr	His	Ile	Leu	Gly	Lys
				725					730				735		
Val	Lys	Phe	Ser	Asp	Ser	Glu	Arg	Thr	Met	Glu	Val	Cys	Tyr	Asn	Thr
			740					745					750		
Leu	Ala	Asn	Ser	Leu	Ser	Ile	Met	Pro	Val	Leu	Glu	Gly	Pro	Thr	Pro
		755					760					765			
Pro	Pro	Asp	Ser	Lys	Ser	Val	Ser	Gln	Asp	Ser	Ser	Gly	Gln	Gln	Glu
		770				775					780				
Cys	Tyr	Leu	Val	Phe	Ile	Gly	Cys	Ser	Leu	Lys	Glu	Asp	Ser	Ile	Lys
785					790					795					800
Asp	Trp	Leu	Arg	Gln	Ser	Ala	Lys	Gln	Lys	Pro	Gln	Arg	Lys	Ala	Leu
				805					810				815		
Lys	Thr	Arg	Gly	Met	Leu	Thr	Gln	Gln	Glu	Ile	Arg	Ser	Ile	His	Val
			820					825					830		
Lys	Arg	His	Leu	Glu	Pro	Leu	Pro	Ala	Gly	Tyr	Phe	Tyr	Asn	Gly	Thr
			835				840					845			
Gln	Phe	Val	Asn	Phe	Phe	Gly	Asp	Lys	Thr	Asp	Phe	His	Pro	Leu	Met
		850				855				860					
Asp	Gln	Phe	Met	Asn	Asp	Tyr	Val	Glu	Glu	Ala	Asn	Arg	Glu	Ile	Glu
865					870					875					880
Lys	Tyr	Asn	Gln	Glu	Leu	Glu	Gln	Gln	Glu	Tyr	His	Asp	Leu	Phe	Glu
				885					890				895		
Leu	Lys	Pro													
		899													

<210> 3066

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3066

Leu	Ala	Pro	Leu	Arg	Cys	Gln	Pro	Gly	Thr	Arg	Thr	Gln	Pro	Arg	Ser
1				5				10					15		
His	Pro	Ala	Ala	Asn	Asp	Pro	Ser	Ala	Ala	Met	Ser	Ala	Ala	Gly	Ala

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<210> 3067
<211> 338
<212> PRT
<213> Homo sapiens
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4737

290 295 300
 Pro Ser Ile Thr Leu Gly Gln Tyr Val Gln Pro Gln Gly Val Ser Val
 305 310 315 320
 Val Asp Phe Val Arg Phe Glu Cys Gly Glu Gly Glu Glu Ala Ala Glu
 325 330 335
 Thr Glu
 338

<210> 3068
 <211> 558
 <212> PRT
 <213> Homo sapiens

<400> 3068
 Asn Ser Arg Val Trp Gly Pro Trp Thr Glu Pro Ser Ala Gly Ser Leu
 1 5 10 15
 Arg Pro Met Ala Arg Lys Gln Asn Arg Asn Ser Lys Glu Leu Gly Leu
 20 25 30
 Val Pro Leu Thr Asp Asp Thr Ser His Ala Gly Pro Pro Gly Pro Gly
 35 40 45
 Arg Ala Leu Leu Glu Cys Asp His Leu Arg Ser Gly Val Pro Gly Gly
 50 55 60
 Arg Arg Arg Lys Asp Trp Ser Cys Ser Leu Leu Val Ala Ser Leu Ala
 65 70 75 80
 Gly Ala Phe Gly Ser Ser Phe Leu Tyr Gly Tyr Asn Leu Ser Val Val
 85 90 95
 Asn Ala Pro Thr Pro Tyr Ile Lys Ala Phe Tyr Asn Glu Ser Trp Glu
 100 105 110
 Arg Arg His Gly Arg Pro Ile Asp Pro Asp Thr Leu Thr Leu Leu Trp
 115 120 125
 Ser Val Thr Val Ser Ile Phe Ala Ile Gly Gly Leu Val Gly Thr Leu
 130 135 140
 Ile Val Lys Met Ile Gly Lys Val Leu Gly Arg Lys His Thr Leu Leu
 145 150 155 160
 Ala Asn Asn Gly Phe Ala Ile Ser Ala Ala Leu Leu Met Ala Cys Ser
 165 170 175
 Leu Gln Ala Gly Ala Phe Glu Met Leu Ile Val Gly Arg Phe Ile Met
 180 185 190
 Gly Ile Asp Gly Gly Val Ala Leu Ser Val Leu Pro Met Tyr Leu Ser
 195 200 205
 Glu Ile Ser Pro Lys Glu Ile Arg Gly Ser Leu Gly Gln Val Thr Ala
 210 215 220
 Ile Phe Ile Cys Ile Gly Val Phe Thr Gly Gln Leu Leu Gly Leu Pro
 225 230 235 240
 Glu Leu Leu Gly Lys Glu Ser Thr Trp Pro Tyr Leu Phe Gly Val Ile
 245 250 255
 Val Val Pro Ala Val Val Gln Leu Leu Ser Leu Pro Phe Leu Pro Asp
 260 265 270
 Ser Pro Arg Tyr Leu Leu Leu Glu Lys His Asn Glu Ala Arg Ala Val
 275 280 285
 Lys Ala Phe Gln Thr Phe Leu Gly Lys Ala Asp Val Ser Gln Glu Val
 290 295 300
 Glu Glu Val Leu Ala Glu Ser Arg Val Gln Arg Ser Ile Arg Leu Val
 305 310 315 320
 Ser Val Leu Glu Leu Leu Arg Ala Pro Tyr Val Arg Trp Gln Val Val
 325 330 335
 Thr Val Ile Val Thr Met Ala Cys Tyr Gln Leu Cys Gly Leu Asn Ala
 340 345 350
 Ile Trp Phe Tyr Thr Asn Ser Ile Phe Gly Lys Ala Gly Ile Pro Pro
 355 360 365
 Ala Lys Ile Pro Tyr Val Thr Leu Ser Thr Gly Gly Ile Glu Thr Leu

370	375	380
Ala Ala Val Phe Ser Gly	Leu Val Ile Glu His Leu Gly Arg Arg Pro	
385	390	395
Leu Leu Ile Gly Gly Phe Gly	Leu Met Gly Leu Phe Phe Gly Thr Leu	400
405	410	415
Thr Ile Thr Leu Thr Leu Gln Asp His Ala Pro Trp Val Pro Tyr Leu		
420	425	430
Ser Ile Val Gly Ile Leu Ala Ile Ile Ala Ser Phe Cys Ser Gly Pro		
435	440	445
Gly Gly Ile Pro Phe Ile Leu Thr Gly Glu Phe Phe Gln Gln Ser Gln		
450	455	460
Arg Pro Ala Ala Phe Ile Ile Ala Gly Thr Val Asn Trp Leu Ser Asn		
465	470	475
Phe Ala Val Gly Leu Leu Phe Pro Phe Ile Gln Lys Ser Leu Asp Thr		
485	490	495
Tyr Cys Phe Leu Val Phe Ala Thr Ile Cys Ile Thr Gly Ala Ile Tyr		
500	505	510
Leu Tyr Phe Val Leu Pro Glu Thr Lys Asn Arg Thr Tyr Ala Glu Ile		
515	520	525
Ser Gln Ala Phe Ser Lys Arg Asn Lys Ala Tyr Pro Pro Glu Glu Lys		
530	535	540
Ile Asp Ser Ala Val Thr Asp Gly Lys Ile Asn Gly Arg Pro		
545	550	555
		558

<210> 3069
 <211> 186
 <212> PRT
 <213> Homo sapiens

<400> 3069
Ala Ala Gly Ala Val Val Ser Ala Met Pro Lys Ala Lys Gly Lys Thr
1 5 10 15
Arg Arg Gln Lys Phe Gly Tyr Ser Val Asn Arg Lys Arg Leu Asn Arg
20 25 30
Asn Ala Arg Arg Lys Ala Ala Pro Arg Ile Glu Cys Ser His Ile Arg
35 40 45
His Ala Trp Asp His Ala Lys Ser Val Arg Gln Asn Leu Ala Glu Met
50 55 60
Gly Leu Ala Val Asp Pro Asn Arg Ala Val Pro Leu Arg Lys Arg Lys
65 70 75 80
Val Lys Ala Met Glu Val Asp Ile Glu Glu Arg Pro Lys Glu Leu Val
85 90 95
Arg Lys Pro Tyr Val Leu Asn Asp Leu Glu Ala Glu Ala Ser Leu Pro
100 105 110
Glu Lys Lys Gly Asn Thr Leu Ser Arg Asp Leu Ile Asp Tyr Val Arg
115 120 125
Tyr Met Val Glu Asn His Gly Glu Asp Tyr Lys Ala Met Ala Arg Asp
130 135 140
Glu Lys Asn Tyr Tyr Gln Asp Thr Pro Lys Gln Ile Arg Ser Lys Ile
145 150 155 160
Asn Val Tyr Lys Arg Phe Tyr Pro Ala Glu Trp Gln Asp Phe Leu Asp
165 170 175
Ser Leu Gln Lys Arg Lys Met Glu Val Glu
180 185 186

<210> 3070
 <211> 565
 <212> PRT
 <213> Homo sapiens

<400> 3070

Leu Ala Glu Pro Glu Val Ala Thr Asp Ser Gly Gln Gln Ala Asp Leu
1 5 10 15
Pro Ala Glu Gly Asp Pro Arg Ala Glu Ala Ser Cys Ser Val Leu
20 25 30
His Ser Lys Pro His Ala Met Ala Asp Ser Arg Asp Pro Ala Ser Asp
35 40 45
Gln Met Gln His Trp Lys Glu Gln Arg Ala Ala Gln Lys Ala Asp Val
50 55 60
Leu Thr Thr Gly Ala Gly Asn Pro Val Gly Asp Lys Leu Asn Val Ile
65 70 75 80
Thr Val Gly Pro Arg Gly Pro Leu Leu Val Gln Asp Val Val Phe Thr
85 90 95
Asp Glu Met Ala His Phe Asp Arg Glu Arg Ile Pro Glu Arg Val Val
100 105 110
His Ala Lys Gly Ala Gly Ala Phe Gly Tyr Phe Glu Val Thr His Asp
115 120 125
Ile Thr Lys Tyr Ser Lys Ala Lys Val Phe Glu His Ile Gly Lys Lys
130 135 140
Thr Pro Ile Ala Val Arg Phe Ser Thr Val Ala Gly Glu Ser Gly Ser
145 150 155 160
Ala Asp Thr Val Arg Asp Pro Arg Gly Phe Ala Val Lys Phe Tyr Thr
165 170 175
Glu Asp Gly Asn Trp Asp Leu Val Gly Asn Asn Thr Pro Ile Phe Phe
180 185 190
Ile Arg Asp Pro Ile Leu Phe Pro Ser Phe Ile His Ser Gln Lys Arg
195 200 205
Asn Pro Gln Thr His Leu Lys Asp Pro Asp Met Val Trp Asp Phe Trp
210 215 220
Ser Leu Arg Pro Glu Ser Leu His Gln Val Ser Phe Leu Phe Ser Asp
225 230 235 240
Arg Gly Ile Pro Asp Gly His Arg His Met Asn Gly Tyr Gly Ser His
245 250 255
Thr Phe Lys Leu Val Asn Ala Asn Gly Glu Ala Val Tyr Cys Lys Phe
260 265 270
His Tyr Lys Thr Asp Gln Gly Ile Lys Asn Leu Ser Val Glu Asp Ala
275 280 285
Ala Arg Leu Ser Gln Glu Asp Pro Asp Tyr Gly Ile Arg Asp Leu Phe
290 295 300
Asn Ala Ile Ala Thr Gly Lys Tyr Pro Ser Trp Thr Phe Tyr Ile Gln
305 310 315 320
Val Met Thr Phe Asn Gln Ala Glu Thr Phe Pro Phe Asn Pro Phe Asp
325 330 335
Leu Thr Lys Val Trp Pro His Lys Asp Tyr Pro Leu Ile Pro Val Gly
340 345 350
Lys Leu Val Leu Asn Arg Asn Pro Val Asn Tyr Phe Ala Glu Val Glu
355 360 365
Gln Ile Ala Phe Asp Pro Ser Asn Met Pro Pro Gly Ile Glu Ala Ser
370 375 380
Pro Asp Lys Met Leu Gln Gly Arg Leu Phe Ala Tyr Pro Asp Thr His
385 390 395 400
Arg His Arg Leu Gly Pro Asn Tyr Leu His Ile Pro Val Asn Cys Pro
405 410 415
Tyr Arg Ala Arg Val Ala Asn Tyr Gln Arg Asp Gly Pro Met Cys Met
420 425 430
Gln Asp Asn Gln Gly Gly Ala Pro Asn Tyr Tyr Pro Asn Ser Phe Gly
435 440 445
Ala Pro Glu Gln Gln Pro Ser Ala Leu Glu His Ser Ile Gln Tyr Ser
450 455 460
Gly Glu Val Arg Arg Phe Asn Thr Ala Asn Asp Asp Asn Val Thr Gln
465 470 475 480
Val Arg Ala Phe Tyr Val Asn Val Leu Asn Glu Glu Gln Arg Lys Arg

				485						490					495				
Leu	Cys	Glu	Asn	Ile	Ala	Gly	His	Leu	Lys	Asp	Ala	Gln	Ile	Phe	Ile				
			500						505				510						
Gln	Lys	Lys	Ala	Val	Lys	Asn	Phe	Thr	Glu	Val	His	Pro	Asp	Tyr	Gly				
		515					520					525							
Ser	His	Ile	Gln	Ala	Leu	Leu	Asp	Lys	Tyr	Asn	Ala	Glu	Lys	Pro	Lys				
	530					535					540								
Asn	Ala	Ile	His	Thr	Phe	Val	Gln	Ser	Gly	Ser	His	Leu	Ala	Ala	Arg				
545					550					555					560				
Glu	Lys	Ala	Asn	Leu															
				565															

<210> 3071
 <211> 395
 <212> PRT
 <213> Homo sapiens

<400> 3071

Ser	Leu	Gly	Trp	Leu	Glu	Arg	Pro	Pro	Ala	Leu	Ser	Arg	Ala	Ala	Gly				
1				5					10					15					
Asp	Gly	Ala	Arg	Arg	Leu	Ser	Gly	Ser	Arg	Arg	Gly	Asp	Val	Trp	Leu				
			20					25					30						
Thr	Ser	Ser	Ala	Ala	Gly	Leu	Leu	Arg	Ser	Val	Ala	Gly	Gly	Ser	Trp				
		35					40					45							
Cys	Gly	Gly	Gln	Leu	Arg	Ala	Arg	Gly	Gly	Ser	Gly	Arg	Cys	Val	Ala				
	50					55					60								
Arg	Ala	Met	Thr	Gly	Asn	Ala	Gly	Glu	Trp	Cys	Leu	Met	Glu	Ser	Asp				
65					70				75						80				
Pro	Gly	Val	Phe	Thr	Glu	Leu	Ile	Lys	Gly	Phe	Gly	Cys	Arg	Gly	Ala				
				85				90						95					
Gln	Val	Glu	Glu	Ile	Trp	Ser	Leu	Glu	Pro	Glu	Asn	Phe	Glu	Lys	Leu				
		100						105					110						
Lys	Pro	Val	His	Gly	Leu	Ile	Phe	Leu	Phe	Lys	Trp	Gln	Pro	Gly	Glu				
		115					120					125							
Glu	Pro	Ala	Gly	Ser	Val	Val	Gln	Asp	Ser	Arg	Leu	Asp	Thr	Ile	Phe				
		130				135					140								
Phe	Ala	Lys	Gln	Val	Ile	Asn	Asn	Ala	Cys	Ala	Thr	Gln	Ala	Ile	Val				
145					150				155					160					
Ser	Val	Leu	Leu	Asn	Cys	Thr	His	Gln	Asp	Val	His	Leu	Gly	Glu	Thr				
				165				170						175					
Leu	Ser	Glu	Phe	Lys	Glu	Phe	Ser	Gln	Ser	Phe	Asp	Ala	Ala	Met	Lys				
			180					185					190						
Gly	Leu	Ala	Leu	Ser	Asn	Ser	Asp	Val	Ile	Arg	Gln	Val	His	Asn	Ser				
		195					200						205						
Phe	Ala	Arg	Gln	Gln	Met	Phe	Glu	Phe	Asp	Thr	Lys	Thr	Ser	Ala	Lys				
		210				215						220							
Glu	Glu	Asp	Ala	Phe	His	Phe	Val	Ser	Tyr	Val	Pro	Val	Asn	Gly	Arg				
225					230					235				240					
Leu	Tyr	Glu	Leu	Asp	Gly	Leu	Arg	Glu	Gly	Pro	Ile	Asp	Leu	Gly	Ala				
				245					250				255						
Cys	Asn	Gln	Asp	Asp	Trp	Ile	Ser	Ala	Val	Arg	Pro	Val	Ile	Glu	Lys				
			260					265					270						
Arg	Ile	Gln	Lys	Tyr	Ser	Glu	Gly	Glu	Ile	Arg	Phe	Asn	Leu	Met	Ala				
		275					280					285							
Ile	Val	Ser	Asp	Arg	Lys	Met	Ile	Tyr	Glu	Gln	Lys	Ile	Ala	Glu	Leu				
		290				295						300							
Gln	Arg	Gln	Leu	Ala	Glu	Glu	Glu	Pro	Met	Asp	Thr	Asp	Gln	Gly	Asn				
305					310					315				320					
Ser	Met	Leu	Ser	Ala	Ile	Gln	Ser	Glu	Val	Ala	Lys	Asn	Gln	Met	Leu				
				325					330				335						
Ile	Glu	Glu	Glu	Val	Gln	Lys	Leu	Lys	Arg	Tyr	Lys	Ile	Glu	Asn	Ile				

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<210> 3072
<211> 891
<212> .PRT
<213> Homo sapiens
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4742

370	375	380	
Val Ile Pro Ile Cys Pro Arg Ser Ala Ser Cys Ser Pro Ile Ile Met			
385	390	395	400
Pro Tyr Lys Ala Ala His Ser Arg Asn Ser Met Asp Arg Pro Lys Leu			
	405	410	415
Phe Val Thr Pro Pro Glu Gly Ser Ser Arg Arg Arg Ile Ile His Gly			
	420	425	430
Thr Ala Ser Tyr Lys Lys Glu Arg Glu Arg Glu Asn Val Leu Phe Leu			
	435	440	445
Thr Ser Gly Thr Arg Arg Ala Val Ser Pro Ser Asn Pro Lys Ala Arg			
	450	455	460
Gln Pro Ala Arg Ser Arg Leu Trp Leu Pro Ser Lys Ser Leu Pro His			
465	470	475	480
Leu Pro Gly Thr Pro Arg Pro Thr Ser Ser Leu Pro Pro Gly Ser Val			
	485	490	495
Lys Ala Ala Pro Ala Gln Val Arg Pro Pro Ser Pro Gly Asn Ile Arg			
	500	505	510
Pro Val Lys Arg Glu Val Lys Val Glu Pro Glu Lys Lys Asp Pro Glu			
	515	520	525
Lys Glu Pro Gln Lys Val Ala Asn Glu Pro Ser Leu Lys Gly Arg Ala			
	530	535	540
Pro Leu Val Lys Val Glu Glu Ala Thr Val Glu Glu Arg Thr Pro Ala			
545	550	555	560
Glu Pro Glu Val Gly Pro Ala Ala Pro Ala Met Ala Pro Ala Pro Ala			
	565	570	575
Ser Ala Pro Ala Pro Ala Ser Ala Pro Ala Pro Ala Pro Val Pro Thr			
	580	585	590
Pro Ala Met Val Ser Ala Pro Ser Ser Thr Val Asn Ala Ser Ala Ser			
	595	600	605
Val Lys Thr Ser Ala Gly Thr Thr Asp Pro Glu Glu Ala Thr Arg Leu			
	610	615	620
Leu Ala Glu Lys Arg Arg Leu Ala Arg Glu Gln Arg Glu Lys Glu Glu			
625	630	635	640
Arg Glu Arg Arg Glu Gln Glu Glu Leu Glu Arg Gln Lys Arg Glu Glu			
	645	650	655
Leu Ala Gln Arg Val Ala Glu Glu Arg Thr Thr Arg Arg Glu Glu Glu			
	660	665	670
Ser Arg Arg Leu Glu Ala Glu Gln Ala Arg Glu Lys Glu Glu Gln Leu			
	675	680	685
Gln Arg Gln Ala Glu Glu Arg Ala Leu Arg Glu Trp Glu Glu Ala Glu			
	690	695	700
Arg Ala Gln Arg Gln Lys Glu Glu Glu Ala Arg Val Arg Glu Glu Ala			
705	710	715	720
Glu Arg Val Arg Gln Glu Arg Glu Lys His Phe Gln Arg Glu Glu Gln			
	725	730	735
Glu Arg Leu Glu Arg Lys Lys Arg Leu Glu Glu Ile Met Lys Arg Thr			
	740	745	750
Arg Arg Thr Glu Ala Thr Asp Lys Lys Thr Ser Asp Gln Arg Asn Gly			
	755	760	765
Asp Ile Ala Lys Gly Ala Leu Thr Gly Gly Thr Glu Val Ser Ala Leu			
	770	775	780
Pro Cys Thr Thr Asn Ala Pro Gly Asn Gly Lys Pro Val Gly Ser Pro			
785	790	795	800
His Val Val Thr Ser His Gln Ser Lys Val Thr Val Glu Ser Thr Pro			
	805	810	815
Asp Leu Glu Lys Gln Pro Asn Glu Asn Gly Val Ser Val Gln Asn Glu			
	820	825	830
Asn Phe Glu Glu Ile Ile Asn Leu Pro Ile Gly Ser Lys Pro Ser Arg			
	835	840	845
Leu Asp Val Thr Asn Ser Glu Ser Pro Glu Ile Pro Leu Asn Pro Ile			
	850	855	860
Leu Ala Phe Asp Asp Glu Gly Thr Leu Gly Pro Leu Pro Gln Val Asp			
865	870	875	880
Gly Val Gln Thr Gln Gln Thr Ala Glu Val Ile			

885

890 891

<210> 3073
 <211> 783
 <212> PRT
 <213> Homo sapiens

<400> 3073
 Pro Pro Arg Val Cys Arg Asp His Val Cys Leu Ile Cys Trp Asp Pro
 1 5 10 15
 Ile Ala Gly Thr Gly Gly Ser Arg Ser Thr Met Pro Ala Leu Pro Leu
 20 25 30
 Asp Gln Leu Gln Ile Thr His Lys Asp Pro Lys Thr Gly Lys Leu Arg
 35 40 45
 Thr Ser Pro Ala Leu His Pro Glu Gln Lys Ala Asp Arg Tyr Phe Val
 50 55 60
 Leu Tyr Lys Pro Pro Pro Lys Asp Asn Ile Pro Ala Leu Val Glu Glu
 65 70 75 80
 Tyr Leu Glu Arg Ala Thr Phe Val Ala Asn Asp Leu Asp Trp Leu Leu
 85 90 95
 Ala Leu Pro His Asp Lys Phe Trp Cys Gln Val Ile Phe Asp Glu Thr
 100 105 110
 Leu Gln Lys Cys Leu Asp Ser Tyr Leu Arg Tyr Val Pro Arg Lys Phe
 115 120 125
 Asp Glu Gly Val Ala Ser Ala Pro Glu Val Val Asp Met Gln Lys Arg
 130 135 140
 Leu His Arg Ser Val Phe Leu Thr Phe Leu Arg Met Ser Thr His Lys
 145 150 155 160
 Glu Ser Lys Asp His Phe Ile Ser Pro Ser Ala Phe Gly Glu Ile Leu
 165 170 175
 Tyr Asn Asn Phe Leu Phe Asp Ile Pro Lys Ile Leu Asp Leu Cys Val
 180 185 190
 Leu Phe Gly Lys Gly Asn Ser Pro Leu Leu Gln Lys Met Ile Gly Asn
 195 200 205
 Ile Phe Thr Gln Gln Pro Ser Tyr Tyr Ser Asp Leu Asp Glu Thr Leu
 210 215 220
 Pro Thr Ile Leu Gln Val Phe Ser Asn Ile Leu Gln His Cys Gly Leu
 225 230 235 240
 Gln Gly Asp Gly Ala Asn Thr Thr Pro Gln Lys Leu Glu Glu Arg Gly
 245 250 255
 Arg Leu Thr Pro Ser Asp Met Pro Leu Leu Glu Leu Lys Asp Ile Val
 260 265 270
 Leu Tyr Leu Cys Asp Thr Cys Thr Thr Leu Trp Ala Phe Leu Asp Ile
 275 280 285
 Phe Pro Leu Ala Cys Gln Thr Phe Gln Lys His Asp Phe Cys Tyr Arg
 290 295 300
 Leu Ala Ser Phe Tyr Glu Ala Ala Ile Pro Glu Met Glu Ser Ala Ile
 305 310 315 320
 Lys Lys Arg Arg Leu Glu Asp Ser Lys Leu Leu Gly Asp Leu Trp Gln
 325 330 335
 Arg Leu Ser His Ser Arg Lys Lys Leu Met Glu Ile Phe His Ile Ile
 340 345 350
 Leu Asn Gln Ile Cys Leu Leu Pro Ile Leu Glu Ser Ser Cys Asp Asn
 355 360 365
 Ile Gln Gly Phe Ile Glu Glu Phe Leu Gln Ile Phe Ser Ser Leu Leu
 370 375 380
 Gln Glu Lys Arg Phe Leu Arg Asp Tyr Asp Ala Leu Phe Pro Val Ala
 385 390 395 400
 Glu Asp Ile Ser Leu Leu Gln Gln Ala Ser Ser Val Leu Asp Glu Thr
 405 410 415
 Arg Thr Ala Tyr Ile Leu Gln Ala Val Glu Ser Ala Trp Glu Gly Val

										420			425			430		
Asp	Arg	Arg	Lys	Ala	Thr	Asp	Ala	Lys	Asp	Pro	Ser	Val	Ile	Glu	Glu			
										435			440			445		
Pro	Asn	Gly	Glu	Pro	Asn	Gly	Val	Thr	Val	Thr	Ala	Glu	Ala	Val	Ser			
										450			455			460		
Gln	Ala	Ser	Ser	His	Pro	Glu	Asn	Ser	Glu	Glu	Glu	Glu	Cys	Met	Gly			
										465			470			475		
Ala	Ala	Ala	Ala	Val	Gly	Pro	Ala	Met	Cys	Gly	Val	Glu	Leu	Asp	Ser			
										485			490			495		
Leu	Ile	Ser	Gln	Val	Lys	Asp	Leu	Leu	Pro	Asp	Leu	Gly	Glu	Gly	Phe			
										500			505			510		
Ile	Leu	Ala	Cys	Leu	Glu	Tyr	Tyr	His	Tyr	Asp	Pro	Glu	Gln	Val	Ile			
										515			520			525		
Asn	Asn	Ile	Leu	Glu	Glu	Arg	Leu	Ala	Pro	Thr	Leu	Ser	Gln	Leu	Asp			
										530			535			540		
Arg	Asn	Leu	Asp	Arg	Glu	Met	Lys	Pro	Asp	Pro	Thr	Pro	Leu	Leu	Thr			
										545			550			555		
Ser	Arg	His	Asn	Val	Phe	Gln	Asn	Asp	Glu	Phe	Asp	Val	Phe	Ser	Arg			
										565			570			575		
Asp	Ser	Val	Asp	Leu	Ser	Arg	Val	His	Lys	Gly	Lys	Ser	Thr	Arg	Lys			
										580			585			590		
Glu	Glu	Asn	Thr	Arg	Ser	Leu	Leu	Asn	Asp	Lys	Arg	Ala	Val	Ala	Ala			
										595			600			605		
Gln	Arg	Gln	Arg	Tyr	Glu	Gln	Tyr	Ser	Val	Val	Val	Glu	Glu	Val	Pro			
										610			615			620		
Leu	Gln	Pro	Gly	Glu	Ser	Leu	Pro	Tyr	His	Ser	Val	Tyr	Tyr	Glu	Asp			
										625			630			635		
Glu	Tyr	Asp	Asp	Thr	Tyr	Asp	Gly	Asn	Gln	Val	Gly	Ala	Asn	Asp	Ala			
										645			650			655		
Asp	Ser	Asp	Asp	Glu	Leu	Ile	Ser	Arg	Arg	Pro	Phe	Thr	Ile	Pro	Gln			
										660			665			670		
Val	Leu	Arg	Thr	Lys	Val	Pro	Arg	Glu	Gly	Gln	Glu	Glu	Asp	Asp	Asp			
										675			680			685		
Asp	Glu	Glu	Asp	Asp	Ala	Asp	Glu	Glu	Ala	Pro	Lys	Pro	Asp	His	Phe			
										690			695			700		
Val	Gln	Asp	Pro	Ala	Val	Leu	Arg	Glu	Lys	Ala	Glu	Ala	Arg	Arg	Met			
										705			710			715		
Ala	Phe	Leu	Ala	Lys	Lys	Gly	Tyr	Arg	His	Asp	Ser	Ser	Thr	Ala	Val			
										725			730			735		
Ala	Gly	Ser	Pro	Arg	Gly	His	Gly	Gln	Ser	Arg	Glu	Thr	Thr	Gln	Glu			
										740			745			750		
Arg	Arg	Lys	Lys	Glu	Ala	Asn	Lys	Ala	Thr	Arg	Ala	Asn	His	Asn	Arg			
										755			760			765		
Arg	Thr	Met	Ala	Asp	Arg	Lys	Arg	Ser	Lys	Gly	Met	Ile	Pro	Ser				
										770			775			780		
													783					

<210> 3074

<211> 82

<212> PRT

<213> Homo sapiens

<400> 3074

Gly	Glu	Ala	Arg	Ser	Pro	Pro	Pro	Ala	Ala	Ala	Leu	Leu	Asp	Met	Asp
1				5					10					15	
Pro	Glu	Thr	Cys	Pro	Cys	Pro	Ser	Gly	Gly	Ser	Cys	Thr	Cys	Ala	Asp
			20					25					30		
Ser	Cys	Lys	Cys	Glu	Gly	Cys	Lys	Cys	Thr	Ser	Cys	Lys	Lys	Ser	Cys
		35					40					45			
Cys	Ser	Cys	Cys	Pro	Ala	Glu	Cys	Glu	Lys	Cys	Ala	Lys	Asp	Cys	Val
	50					55					60				
Cys	Lys	Gly	Gly	Glu	Ala	Ala	Glu	Ala	Glu	Ala	Glu	Lys	Cys	Ser	Cys

65
Cys Gln
82

70

75

80

<210> 3075
<211> 242
<212> PRT
<213> Homo sapiens

<400> 3075
Ser Gln Phe Ser Leu Ser Gln Val Leu Val Asp Ser Ala Glu Glu Gly
1 5 10 15
Ser Leu Ala Ala Ala Ala Glu Leu Ala Ala Gln Lys Arg Glu Gln Arg
20 25 30
Leu Arg Lys Phe Arg Glu Leu His Leu Met Arg Asn Glu Ala Arg Lys
35 40 45
Leu Asn His Gln Glu Val Val Glu Glu Asp Lys Arg Leu Lys Leu Pro
50 55 60
Ala Asn Trp Glu Ala Lys Lys Ala Arg Leu Glu Trp Glu Leu Lys Glu
65 70 75 80
Glu Glu Lys Lys Lys Glu Cys Ala Ala Arg Gly Glu Asp Tyr Glu Lys
85 90 95
Val Lys Leu Leu Glu Ile Ser Ala Glu Asp Ala Glu Arg Trp Glu Arg
100 105 110
Lys Lys Lys Arg Lys Asn Pro Asp Leu Gly Phe Ser Asp Tyr Ala Ala
115 120 125
Ala Gln Leu Arg Gln Tyr His Arg Leu Thr Lys Gln Ile Lys Pro Asp
130 135 140
Met Glu Thr Tyr Glu Arg Leu Arg Glu Lys His Gly Glu Glu Phe Phe
145 150 155 160
Pro Thr Ser Asn Ser Leu Leu His Gly Thr His Val Pro Ser Thr Glu
165 170 175
Glu Ile Asp Arg Met Val Ile Asp Leu Glu Lys Gln Ile Glu Lys Arg
180 185 190
Asp Lys Tyr Ser Arg Arg Arg Pro Tyr Asn Asp Asp Ala Asp Ile Asp
195 200 205
Tyr Ile Asn Glu Arg Asn Ala Lys Phe Asn Lys Lys Ala Glu Arg Phe
210 215 220
Tyr Gly Lys Tyr Thr Ala Glu Ile Lys Gln Asn Leu Glu Arg Gly Thr
225 230 235 240
Ala Val
242

<210> 3076
<211> 242
<212> PRT
<213> Homo sapiens

<400> 3076
Ser Gln Phe Ser Leu Ser Gln Val Leu Val Asp Ser Ala Glu Glu Gly
1 5 10 15
Ser Leu Ala Ala Ala Ala Glu Leu Ala Ala Gln Lys Arg Glu Gln Arg
20 25 30
Leu Arg Lys Phe Arg Glu Leu His Leu Met Arg Asn Glu Ala Arg Lys
35 40 45
Leu Asn His Gln Glu Val Val Glu Glu Asp Lys Arg Leu Lys Leu Pro
50 55 60
Ala Asn Trp Glu Ala Lys Lys Ala Arg Leu Glu Trp Glu Leu Lys Glu

65					70					75				80	
Glu	Glu	Lys	Lys	Lys	Glu	Cys	Ala	Ala	Arg	Gly	Glu	Asp	Tyr	Glu	Lys
				85					90					95	
Val	Lys	Leu	Leu	Glu	Ile	Ser	Ala	Glu	Asp	Ala	Glu	Arg	Trp	Glu	Arg
			100					105					110		
Lys	Lys	Lys	Arg	Lys	Asn	Pro	Asp	Leu	Gly	Phe	Ser	Asp	Tyr	Ala	Ala
		115					120					125			
Ala	Gln	Leu	Arg	Gln	Tyr	His	Arg	Leu	Thr	Lys	Gln	Ile	Lys	Pro	Asp
	130					135					140				
Met	Glu	Thr	Tyr	Glu	Arg	Leu	Arg	Glu	Lys	His	Gly	Glu	Glu	Phe	Phe
	145				150					155				160	
Pro	Thr	Ser	Asn	Ser	Leu	Leu	His	Gly	Thr	His	Val	Pro	Ser	Thr	Glu
			165					170						175	
Glu	Ile	Asp	Arg	Met	Val	Ile	Asp	Leu	Glu	Lys	Gln	Ile	Glu	Lys	Arg
		180						185					190		
Asp	Lys	Tyr	Ser	Arg	Arg	Arg	Pro	Tyr	Asn	Asp	Asp	Ala	Asp	Ile	Asp
	195						200					205			
Tyr	Ile	Asn	Glu	Arg	Asn	Ala	Lys	Phe	Asn	Lys	Lys	Ala	Glu	Arg	Phe
	210					215					220				
Tyr	Gly	Lys	Tyr	Thr	Ala	Glu	Ile	Lys	Gln	Asn	Leu	Glu	Arg	Gly	Thr
	225				230				235					240	
Ala	Val														
	242														

<210> 3077

<211> 322

<212> PRT

<213> Homo sapiens

<400> 3077

Phe	Arg	Leu	Arg	Pro	Arg	Arg	Ala	Cys	Ala	Gln	Leu	Leu	Trp	His	Pro
1				5					10					15	
Ala	Ala	Gly	Met	Ala	Ser	Trp	Ala	Lys	Gly	Arg	Ser	Tyr	Leu	Ala	Pro
			20					25					30		
Gly	Leu	Leu	Gln	Gly	Gln	Val	Ala	Ile	Val	Thr	Gly	Gly	Ala	Thr	Gly
	35						40					45			
Ile	Gly	Lys	Ala	Ile	Val	Lys	Glu	Leu	Leu	Glu	Leu	Gly	Ser	Asn	Val
	50					55					60				
Val	Ile	Ala	Ser	Arg	Lys	Leu	Glu	Arg	Leu	Lys	Ser	Ala	Ala	Asp	Glu
	65				70					75				80	
Leu	Gln	Ala	Asn	Leu	Pro	Pro	Thr	Lys	Gln	Ala	Arg	Val	Ile	Pro	Ile
			85						90					95	
Gln	Cys	Asn	Ile	Arg	Asn	Glu	Glu	Glu	Val	Asn	Asn	Leu	Val	Lys	Ser
		100					105						110		
Thr	Leu	Asp	Thr	Phe	Gly	Lys	Ile	Asn	Phe	Leu	Val	Asn	Asn	Gly	Gly
	115						120					125			
Gly	Gln	Phe	Leu	Ser	Pro	Ala	Glu	His	Ile	Ser	Ser	Lys	Gly	Trp	His
	130					135					140				
Ala	Val	Leu	Glu	Thr	Asn	Leu	Thr	Gly	Thr	Phe	Tyr	Met	Cys	Lys	Ala
	145				150					155				160	
Val	Tyr	Ser	Ser	Trp	Met	Lys	Lys	His	Gly	Gly	Ser	Ile	Val	Asn	Ile
			165						170					175	
Ile	Val	Pro	Thr	Lys	Ala	Gly	Phe	Pro	Leu	Ala	Val	His	Ser	Gly	Ala
		180						185					190		
Ala	Arg	Ala	Gly	Val	Tyr	Asn	Leu	Thr	Lys	Ser	Leu	Ala	Phe	Glu	Trp
	195					200						205			
Ala	Cys	Ser	Gly	Ile	Arg	Ile	Asn	Cys	Val	Ala	Pro	Gly	Val	Ile	Tyr
	210					215					220				
Ser	Gln	Thr	Ala	Val	Glu	Asn	Tyr	Gly	Ser	Trp	Gly	Gln	Ser	Phe	Phe
	225				230					235				240	
Glu	Gly	Ser	Phe	Gln	Lys	Ile	Pro	Ala	Lys	Arg	Ile	Gly	Val	Pro	Glu

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<210> 3078
<211> 1168
<212> PRT
<213> Homo sapiens
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4748

340										345					350				
Gln	Lys	Glu	Leu	Tyr	Arg	Asp	Val	Met	Arg	Met	Asn	Tyr	Glu	Leu	Leu				
355										360					365				
Ala	Ser	Leu	Gly	Pro	Ala	Ala	Ala	Lys	Pro	Asp	Leu	Ile	Ser	Lys	Leu				
370										375					380				
Glu	Arg	Arg	Ala	Ala	Pro	Trp	Ile	Lys	Asp	Pro	Asn	Gly	Pro	Lys	Trp				
385										390					395				
Gly	Lys	Gly	Arg	Pro	Pro	Gly	Asn	Lys	Lys	Met	Val	Ala	Val	Arg	Glu				
405										410					415				
Ala	Asp	Thr	Gln	Ala	Ser	Ala	Ala	Asp	Ser	Ala	Leu	Leu	Pro	Gly	Ser				
420										425					430				
Pro	Val	Glu	Ala	Arg	Ala	Ser	Cys	Cys	Ser	Ser	Ser	Ser	Ile	Cys	Glu	Glu			
435										440					445				
Gly	Asp	Gly	Pro	Arg	Arg	Ile	Lys	Arg	Thr	Tyr	Arg	Pro	Arg	Ser	Ile				
450										455					460				
Gln	Arg	Ser	Trp	Phe	Gly	Gln	Phe	Pro	Trp	Leu	Val	Ile	Asp	Pro	Lys				
465										470					475				
Glu	Thr	Lys	Leu	Phe	Cys	Ser	Ala	Cys	Ile	Glu	Arg	Pro	Asn	Leu	His				
485										490					495				
Asp	Lys	Ser	Ser	Arg	Leu	Val	Arg	Gly	Tyr	Thr	Gly	Pro	Phe	Lys	Val				
500										505					510				
Glu	Thr	Leu	Lys	Tyr	His	Glu	Val	Ser	Lys	Ala	His	Arg	Leu	Cys	Val				
515										520					525				
Asn	Thr	Val	Glu	Ile	Lys	Glu	Asp	Thr	Pro	His	Thr	Ala	Leu	Val	Pro				
530										535					540				
Glu	Ile	Ser	Ser	Asp	Leu	Met	Ala	Asn	Met	Glu	His	Phe	Phe	Asn	Ala				
545										550					555				
Ala	Tyr	Ser	Ile	Ala	Tyr	His	Ser	Arg	Pro	Leu	Asn	Asp	Phe	Glu	Lys				
565										570					575				
Ile	Leu	Gln	Leu	Leu	Gln	Ser	Thr	Gly	Thr	Val	Ile	Leu	Gly	Lys	Tyr				
580										585					590				
Arg	Asn	Arg	Thr	Ala	Cys	Thr	Gln	Phe	Ile	Lys	Tyr	Ile	Ser	Glu	Thr				
595										600					605				
Leu	Lys	Arg	Glu	Ile	Leu	Glu	Asp	Val	Arg	Asn	Ser	Pro	Cys	Val	Ser				
610										615					620				
Val	Leu	Leu	Asp	Ser	Ser	Thr	Asp	Ala	Ser	Glu	Gln	Ala	Cys	Val	Gly				
625										630					635				
Ile	Tyr	Ile	Arg	Tyr	Phe	Lys	Gln	Met	Glu	Val	Lys	Glu	Ser	Tyr	Ile				
645										650					655				
Thr	Leu	Ala	Pro	Leu	Tyr	Ser	Glu	Thr	Ala	Asp	Gly	Tyr	Phe	Glu	Thr				
660										665					670				
Ile	Val	Ser	Ala	Leu	Asp	Glu	Leu	Asp	Ile	Pro	Phe	Arg	Lys	Pro	Gly				
675										680					685				
Trp	Val	Val	Gly	Leu	Gly	Thr	Asp	Gly	Ser	Ala	Met	Leu	Ser	Cys	Arg				
690										695					700				
Gly	Gly	Leu	Val	Glu	Lys	Phe	Gln	Glu	Val	Ile	Pro	Gln	Leu	Leu	Pro				
705										710					715				
Val	His	Cys	Val	Ala	His	Arg	Leu	His	Leu	Ala	Val	Val	Asp	Ala	Cys				
725										730					735				
Gly	Ser	Ile	Asp	Leu	Val	Lys	Lys	Cys	Asp	Arg	His	Ile	Arg	Thr	Val				
740										745					750				
Phe	Lys	Phe	Tyr	Gln	Ser	Ser	Asn	Lys	Arg	Leu	Asn	Glu	Leu	Gln	Glu				
755										760					765				
Gly	Ala	Ala	Pro	Leu	Glu	Gln	Glu	Ile	Ile	Arg	Leu	Lys	Asp	Leu	Asn				
770										775					780				
Ala	Val	Arg	Trp	Val	Ala	Ser	Arg	Arg	Arg	Thr	Leu	His	Ala	Leu	Leu				
785										790					795				
Val	Ser	Trp	Pro	Ala	Leu	Ala	Arg	His	Leu	Gln	Arg	Val	Ala	Glu	Ala				
805										810					815				
Gly	Gly	Gln	Ile	Gly	His	Arg	Ala	Lys	Gly	Met	Leu	Lys	Leu	Met	Arg				
820										825					830				
Gly	Phe	His	Phe	Val	Lys	Phe	Cys	His	Phe	Leu	Leu	Asp	Phe	Leu	Ser				
835										840					845				
Ile	Tyr	Arg	Pro	Leu	Ser	Glu	Val	Cys	Gln	Lys	Glu	Ile	Val	Leu	Ile				

850	855	860
Thr Glu Val Asn Ala	Thr Leu Gly Arg Ala Tyr	Val Ala Leu Glu Ser
865	870	875
Leu Arg His Gln Ala Gly	Pro Lys Glu Glu Glu	Phe Asn Ala Ser Phe
885	890	895
Lys Asp Gly Arg Leu His Gly Ile	Cys Leu Asp Lys Leu	Glu Val Ala
900	905	910
Glu Gln Arg Phe Gln Ala Asp Arg	Glu Arg Thr Val	Leu Thr Gly Ile
915	920	925
Glu Tyr Leu Gln Gln Arg Phe Asp	Ala Asp Arg Pro Pro	Gln Leu Lys
930	935	940
Asn Met Glu Val Phe Asp Thr Met	Ala Trp Pro Ser	Gly Ile Glu Leu
945	950	955
Ala Ser Phe Gly Asn Asp Asp Ile	Leu Asn Leu Ala Arg	Tyr Phe Glu
965	970	975
Cys Ser Leu Pro Thr Gly Tyr Ser	Glu Glu Ala Leu Leu	Glu Glu Trp
980	985	990
Leu Gly Leu Lys Thr Ile Ala Gln	His Leu Pro Phe	Ser Met Leu Cys
995	1000	1005
Lys Asn Ala Leu Ala Gln His Cys	Arg Phe Pro Leu	Leu Ser Lys Leu
1010	1015	1020
Met Ala Val Val Val Cys Val Pro	Ile Ser Thr Ser	Cys Cys Glu Arg
1025	1030	1035
Gly Phe Lys Ala Met Asn Arg Ile	Arg Thr Asp Glu Arg	Thr Lys Leu
1045	1050	1055
Ser Asn Glu Val Leu Asn Met Leu	Met Met Thr Ala	Val Asn Gly Val
1060	1065	1070
Ala Val Thr Glu Tyr Asp Pro Gln	Pro Ala Ile Gln	His Trp Tyr Leu
1075	1080	1085
Thr Ser Ser Gly Arg Arg Phe Ser	His Val Tyr Thr	Cys Ala Gln Val
1090	1095	1100
Pro Ala Arg Ser Pro Ala Ser Ala	Arg Leu Arg Lys Glu	Glu Met Gly
1105	1110	1115
Ala Leu Tyr Val Glu Glu Pro Arg	Thr Gln Lys Pro Pro	Ile Leu Pro
1125	1130	1135
Ser Arg Glu Ala Ala Glu Val Leu	Lys Asp Cys Ile Met	Glu Pro Pro
1140	1145	1150
Glu Arg Leu Leu Tyr Pro His Thr	Ser Gln Glu Ala	Pro Gly Met Ser
1155	1160	1165
		1168

<210> 3079

<211> 390

<212> PRT

<213> Homo sapiens

<400> 3079

Phe Ser Pro Leu Glu Pro Arg Leu Cys Ser Leu Gly Gly Trp Gly Ala	
1	5
Leu Gln Ala Gly Glu Pro Cys Gln Pro Ser Arg Ala Gly Cys Gly Arg	
20	25
Glu Gly Ala Thr Met Gly Cys Thr Leu Ser Ala Glu Glu Arg Ala Ala	
35	40
Leu Glu Arg Ser Lys Ala Ile Glu Lys Asn Leu Lys Glu Asp Gly Ile	
50	55
Ser Ala Ala Lys Asp Val Lys Leu Leu Leu Leu Gly Ala Gly Glu Ser	
65	70
Gly Lys Ser Thr Ile Val Lys Gln Met Lys Ile Ile His Glu Asp Gly	
85	90
Phe Ser Gly Glu Asp Val Lys Gln Tyr Lys Pro Val Val Tyr Ser Asn	

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<210> 3080
<211> 318
<212> PRT
<213> Homo sapiens
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4751

130	135	140
Met Thr Pro Gly Glu Arg Ile Lys Cys Leu Leu Gln Ile Gln Ala Ser		
145	150	155
Ser Gly Glu Ser Lys Tyr Thr Gly Thr Leu Asp Cys Ala Lys Lys Leu		160
	165	170
Tyr Gln Glu Phe Gly Ile Arg Gly Ile Tyr Lys Gly Thr Val Leu Thr		175
	180	185
Leu Met Arg Asp Val Pro Ala Ser Gly Met Tyr Phe Met Thr Tyr Glu		190
	195	200
Trp Leu Lys Asn Ile Phe Thr Pro Glu Gly Lys Arg Val Ser Glu Leu		205
	210	215
Ser Ala Pro Arg Ile Leu Val Ala Gly Gly Ile Ala Gly Ile Phe Asn		220
225	230	235
Trp Ala Val Ala Ile Pro Pro Asp Val Leu Lys Ser Arg Phe Gln Thr		240
	245	250
Ala Pro Pro Gly Lys Tyr Pro Asn Gly Phe Arg Asp Val Leu Arg Glu		255
	260	265
Leu Ile Arg Asp Glu Gly Val Thr Ser Leu Tyr Lys Gly Phe Asn Ala		270
	275	280
Val Met Ile Arg Ala Phe Pro Ala Asn Ala Ala Cys Phe Leu Gly Phe		285
	290	295
Glu Val Ala Met Lys Phe Leu Asn Trp Ala Thr Pro Asn Leu		300
305	310	315
		318

<210> 3081

<211> 664

<212> PRT

<213> Homo sapiens

<400> 3081

Ile Met Ala Asp Met Glu Asp Leu Phe Gly Ser Asp Ala Asp Ser Glu		
1	5	10
Ala Glu Arg Lys Asp Ser Asp Ser Gly Ser Asp Ser Asp Ser Asp Gln		15
	20	25
Glu Asn Ala Ala Ser Gly Ser Asn Ala Ser Gly Ser Glu Ser Asp Gln		30
	35	40
Asp Glu Arg Gly Asp Ser Gly Gln Pro Ser Asn Lys Glu Leu Phe Gly		45
	50	55
Asp Asp Ser Glu Asp Glu Gly Ala Ser His His Ser Gly Ser Asp Asn		60
	65	70
His Ser Glu Arg Ser Asp Asn Arg Ser Glu Ala Ser Glu Arg Ser Asp		75
	85	90
His Glu Asp Asn Asp Pro Ser Asp Val Asp Gln His Ser Gly Ser Glu		95
	100	105
Ala Pro Asn Asp Asp Glu Asp Glu Gly His Arg Ser Asp Gly Gly Ser		110
	115	120
His His Ser Glu Ala Glu Gly Ser Glu Lys Ala His Ser Asp Asp Glu		125
	130	135
Lys Trp Gly Arg Glu Asp Lys Ser Asp Gln Ser Asp Asp Glu Lys Ile		140
	145	150
Gln Asn Ser Asp Asp Glu Glu Arg Ala Gln Gly Ser Asp Glu Asp Lys		155
	165	170
Leu Gln Asn Ser Asp Asp Asp Glu Lys Met Gln Asn Thr Asp Asp Glu		175
	180	185
Glu Arg Pro Gln Leu Ser Asp Asp Glu Arg Gln Gln Leu Ser Glu Glu		190
	195	200
Glu Lys Ala Asn Ser Asp Asp Glu Arg Pro Val Ala Ser Asp Asn Asp		205
	210	215
Asp Glu Lys Gln Asn Ser Asp Asp Glu Glu Gln Pro Gln Leu Ser Asp		220
	225	230
Glu Glu Lys Met Gln Asn Ser Asp Asp Glu Arg Pro Gln Ala Ser Asp		235
		240

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<210> 3082
<211> 305
<212> PRT
<213> Homo sapiens
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4753

1	5	10	15
Ala Ser Leu	Ala Gly Val Arg Lys Met	Ala Thr Asn Phe	Leu Ala His
	20	25	30
Glu Lys Ile Trp	Phe Asp Lys Phe Lys Tyr Asp	Asp Ala Glu Arg Arg	
	35	40	45
Phe Tyr Glu Gln Met Asn Gly	Pro Val Ala Gly	Ala Ser Arg Gln Glu	
	50	55	60
Asn Gly Ala Ser Val Ile Leu Arg Asp	Ile Ala Arg Ala Arg Glu Asn		
	65	70	75
Ile Gln Lys Ser Leu Ala Gly Ser Ser	Gly Pro Gly Ala Ser Ser Gly		
	85	90	95
Thr Ser Gly Asp His Gly Glu Leu Val	Val Arg Ile Ala Ser Leu Glu		
	100	105	110
Val Glu Asn Gln Ser Leu Arg Gly	Val Val Gln Glu Leu Gln Gln Ala		
	115	120	125
Ile Ser Lys Leu Glu Ala Arg Leu	Asn Val Leu Glu Lys Ser Ser Pro		
	130	135	140
Gly His Arg Ala Thr Ala Pro Gln Thr	Gln His Val Ser Pro Met Arg		
	145	150	155
Gln Val Glu Pro Pro Ala Lys Lys	Pro Ala Thr Pro Ala Glu Asp Asp		
	165	170	175
Glu Asp Asp Asp Ile Asp Leu Phe	Gly Ser Asp Asn Glu Glu Glu Asp		
	180	185	190
Lys Glu Ala Ala Gln Leu Arg Glu	Glu Arg Leu Arg Gln Tyr Ala Glu		
	195	200	205
Lys Lys Ala Lys Lys Pro Ala Leu	Val Ala Lys Ser Ser Ile Leu Leu		
	210	215	220
Asp Val Lys Pro Trp Asp Asp Glu	Thr Asp Met Ala Gln Leu Glu Ala		
	225	230	235
Cys Val Arg Ser Ile Gln Leu Asp	Gly Leu Val Trp Gly Ala Ser Lys		
	245	250	255
Leu Val Pro Val Gly Tyr Gly Ile	Arg Lys Leu Gln Ile Gln Cys Val		
	260	265	270
Val Glu Asp Asp Lys Val Gly Thr	Asp Leu Leu Glu Glu Glu Ile Thr		
	275	280	285
Lys Phe Glu Glu His Val Gln Ser	Val Asp Ile Ala Ala Phe Asn Lys		
	290	295	300
Ile			
305			

<210> 3083

<211> 305

<212> PRT

<213> Homo sapiens

<400> 3083

Val Glu Phe Cys	Leu Pro Ala Ser Ala Asp	Ser Ser Ser	Leu Val Ala
1	5	10	15
Ala Ser Leu Ala	Gly Val Arg Lys Met	Ala Thr Asn Phe	Leu Ala His
	20	25	30
Glu Lys Ile Trp	Phe Asp Lys Phe Lys Tyr Asp	Asp Ala Glu Arg Arg	
	35	40	45
Phe Tyr Glu Gln Met Asn Gly	Pro Val Ala Gly	Ala Ser Arg Gln Glu	
	50	55	60
Asn Gly Ala Ser Val Ile Leu Arg Asp	Ile Ala Arg Ala Arg Glu Asn		
	65	70	75
Ile Gln Lys Ser Leu Ala Gly Ser Ser	Gly Pro Gly Ala Ser Ser Gly		
	85	90	95
Thr Ser Gly Asp His Gly Glu Leu Val	Val Arg Ile Ala Ser Leu Glu		
	100	105	110
Val Glu Asn Gln Ser Leu Arg Gly	Val Val Gln Glu Leu Gln Gln Ala		

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      115      120      125
Ile Ser Lys Leu Glu Ala Arg Leu Asn Val Leu Glu Lys Ser Ser Pro
      130      135      140
Gly His Arg Ala Thr Ala Pro Gln Thr Gln His Val Ser Pro Met Arg
      145      150      155      160
Gln Val Glu Pro Pro Ala Lys Lys Pro Ala Thr Pro Ala Glu Asp Asp
      165      170      175
Glu Asp Asp Asp Ile Asp Leu Phe Gly Ser Asp Asn Glu Glu Glu Asp
      180      185      190
Lys Glu Ala Ala Gln Leu Arg Glu Glu Arg Leu Arg Gln Tyr Ala Glu
      195      200      205
Lys Lys Ala Lys Lys Pro Ala Leu Val Ala Lys Ser Ser Ile Leu Leu
      210      215      220
Asp Val Lys Pro Trp Asp Asp Glu Thr Asp Met Ala Gln Leu Glu Ala
      225      230      235      240
Cys Val Arg Ser Ile Gln Leu Asp Gly Leu Val Trp Gly Ala Ser Lys
      245      250      255
Leu Val Pro Val Gly Tyr Gly Ile Arg Lys Leu Gln Ile Gln Cys Val
      260      265      270
Val Glu Asp Asp Lys Val Gly Thr Asp Leu Leu Glu Glu Glu Ile Thr
      275      280      285
Lys Phe Glu Glu His Val Gln Ser Val Asp Ile Ala Ala Phe Asn Lys
      290      295      300
Ile
      305

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<210> 3084
<211> 1307
<212> PRT
<213> Homo sapiens

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      <400> 3084
Lys Ser Ile Val Lys Ile Arg Lys Arg Met Ala Ala Glu Thr Gln Thr
      1      5      10      15
Leu Asn Phe Gly Pro Glu Trp Leu Arg Ala Leu Ser Ser Gly Gly Ser
      20      25      30
Ile Thr Ser Pro Pro Leu Ser Pro Ala Leu Pro Lys Tyr Lys Leu Ala
      35      40      45
Asp Tyr Arg Tyr Gly Arg Glu Glu Met Leu Ala Leu Phe Leu Lys Asp
      50      55      60
Asn Lys Ile Pro Ser Asp Leu Leu Asp Lys Glu Phe Leu Pro Ile Leu
      65      70      75      80
Gln Glu Glu Pro Leu Pro Pro Leu Ala Leu Val Pro Phe Thr Glu Glu
      85      90      95
Glu Gln Arg Asn Phe Ser Met Ser Val Asn Ser Ala Ala Val Leu Arg
      100      105      110
Leu Thr Gly Arg Gly Gly Gly Gly Thr Val Val Gly Ala Pro Arg Gly
      115      120      125
Arg Ser Ser Ser Arg Gly Arg Gly Arg Gly Arg Gly Glu Cys Gly Phe
      130      135      140
Tyr Gln Arg Ser Phe Asp Glu Val Glu Gly Val Phe Gly Arg Gly Gly
      145      150      155      160
Gly Arg Glu Met His Arg Ser Gln Ser Trp Glu Glu Arg Gly Asp Arg
      165      170      175
Arg Phe Glu Lys Pro Gly Arg Lys Asp Val Gly Arg Pro Asn Phe Glu
      180      185      190
Glu Gly Gly Pro Thr Ser Val Gly Arg Lys His Glu Phe Ile Arg Ser
      195      200      205
Glu Ser Glu Asn Trp Arg Ile Phe Arg Glu Glu Gln Asn Gly Glu Asp
      210      215      220
Glu Asp Gly Gly Trp Arg Leu Ala Gly Ser Arg Arg Asp Gly Glu Arg

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225					230					235				240	
Trp	Arg	Pro	His	Ser	Pro	Asp	Gly	Pro	Arg	Ser	Ala	Gly	Trp	Arg	Glu
				245					250					255	
His	Met	Glu	Arg	Arg	Arg	Arg	Phe	Glu	Phe	Asp	Phe	Arg	Asp	Arg	Asp
			260					265					270		
Asp	Glu	Arg	Gly	Tyr	Arg	Arg	Val	Arg	Ser	Gly	Ser	Gly	Ser	Ile	Asp
		275					280					285			
Asp	Asp	Arg	Asp	Ser	Leu	Pro	Glu	Trp	Cys	Leu	Glu	Asp	Ala	Glu	Glu
	290					295					300				
Glu	Met	Gly	Thr	Phe	Asp	Ser	Ser	Gly	Ala	Phe	Leu	Ser	Leu	Lys	Lys
305					310					315				320	
Val	Gln	Lys	Glu	Pro	Ile	Pro	Glu	Glu	Gln	Glu	Met	Asp	Phe	Arg	Pro
				325					330					335	
Val	Asp	Glu	Gly	Glu	Glu	Cys	Ser	Asp	Ser	Glu	Gly	Ser	His	Asn	Glu
			340					345					350		
Glu	Ala	Lys	Glu	Pro	Asp	Lys	Thr	Asn	Lys	Lys	Glu	Gly	Glu	Lys	Thr
		355					360					365			
Asp	Arg	Val	Gly	Val	Glu	Ala	Ser	Glu	Glu	Thr	Pro	Gln	Thr	Ser	Ser
	370					375					380				
Ser	Ser	Ala	Arg	Pro	Gly	Thr	Pro	Ser	Asp	His	Gln	Ser	Gln	Glu	Ala
385					390					395				400	
Ser	Gln	Phe	Glu	Arg	Lys	Asp	Glu	Pro	Lys	Thr	Glu	Gln	Thr	Glu	Lys
				405					410					415	
Ala	Glu	Glu	Glu	Thr	Arg	Met	Glu	Asn	Ser	Leu	Pro	Ala	Lys	Val	Pro
			420				425						430		
Ser	Arg	Gly	Asp	Glu	Met	Val	Ala	Asp	Val	Gln	Gln	Pro	Leu	Ser	Gln
	435						440					445			
Ile	Pro	Ser	Asp	Thr	Ala	Ser	Pro	Leu	Leu	Ile	Leu	Pro	Pro	Pro	Val
	450					455					460				
Pro	Asn	Pro	Ser	Pro	Thr	Leu	Arg	Pro	Val	Glu	Thr	Pro	Val	Val	Gly
465					470					475				480	
Ala	Pro	Gly	Met	Gly	Ser	Val	Ser	Thr	Glu	Pro	Asp	Asp	Glu	Glu	Gly
				485					490					495	
Leu	Lys	His	Leu	Glu	Gln	Gln	Ala	Glu	Lys	Met	Val	Ala	Tyr	Leu	Gln
			500					505					510		
Asp	Ser	Ala	Leu	Asp	Asp	Glu	Arg	Leu	Ala	Ser	Lys	Leu	Gln	Glu	His
	515						520					525			
Arg	Ala	Lys	Gly	Val	Ser	Ile	Pro	Leu	Met	His	Glu	Ala	Met	Gln	Lys
	530					535					540				
Trp	Tyr	Tyr	Lys	Asp	Pro	Gln	Gly	Glu	Ile	Gln	Gly	Pro	Phe	Asn	Asn
545					550					555				560	
Gln	Glu	Met	Ala	Glu	Trp	Phe	Gln	Ala	Gly	Tyr	Phe	Thr	Met	Ser	Leu
				565					570					575	
Leu	Val	Lys	Arg	Ala	Cys	Asp	Glu	Ser	Phe	Gln	Pro	Leu	Gly	Asp	Ile
			580				585						590		
Met	Lys	Met	Trp	Gly	Arg	Val	Pro	Phe	Ser	Pro	Gly	Pro	Ala	Pro	Pro
	595						600					605			
Pro	His	Met	Gly	Glu	Leu	Asp	Gln	Glu	Arg	Leu	Thr	Arg	Gln	Gln	Glu
	610					615					620				
Leu	Thr	Ala	Leu	Tyr	Gln	Met	Gln	His	Leu	Gln	Tyr	Gln	Gln	Phe	Leu
625					630					635				640	
Ile	Gln	Gln	Gln	Tyr	Ala	Gln	Val	Leu	Ala	Gln	Gln	Gln	Lys	Ala	Ala
				645					650					655	
Leu	Ser	Ser	Gln	Gln	Gln	Gln	Gln	Leu	Ala	Leu	Leu	Leu	Gln	Gln	Phe
			660					665					670		
Gln	Thr	Leu	Lys	Met	Arg	Ile	Ser	Asp	Gln	Asn	Ile	Ile	Pro	Ser	Val
	675						680					685			
Thr	Arg	Ser	Val	Ser	Val	Pro	Asp	Thr	Gly	Ser	Ile	Trp	Glu	Leu	Gln
	690					695					700				
Pro	Thr	Ala	Ser	Gln	Pro	Thr	Val	Trp	Glu	Gly	Gly	Ser	Val	Trp	Asp
705					710					715				720	
Leu	Pro	Leu	Asp	Thr	Thr	Thr	Pro	Gly	Pro	Ala	Leu	Glu	Gln	Leu	Gln
				725					730					735	
Gln	Leu	Glu	Lys	Ala	Lys	Ala	Ala	Lys	Leu	Glu	Gln	Glu	Arg	Arg	Glu

740	745	750
Ala Glu Met Arg	Ala Lys Arg Glu Glu Glu Glu Arg Lys Arg Gln Glu	
755	760	765
Glu Leu Arg Arg Arg Gln Lys Gly Ile Leu Arg Arg Gln Gln Glu Glu		
770	775	780
Glu Arg Lys Arg Arg Glu Glu Glu Leu Ala Arg Arg Lys Gln Glu		
785	790	795
Glu Ala Leu Arg Arg Gln Arg Glu Gln Glu Ile Ala Leu Arg Arg Gln		
805	810	815
Arg Glu Glu Glu Glu Arg Gln Gln Gln Glu Glu Ala Leu Arg Arg Leu		
820	825	830
Glu Glu Arg Arg Arg Glu Glu Glu Glu Arg Arg Lys Gln Glu Glu Leu		
835	840	845
Leu Arg Lys Gln Glu Glu Glu Ala Ala Lys Trp Ala Arg Glu Glu Glu		
850	855	860
Glu Ala Gln Arg Arg Leu Glu Glu Asn Arg Leu Arg Met Glu Glu Glu		
865	870	875
Ala Ala Arg Leu Arg His Glu Glu Glu Glu Arg Lys Arg Lys Glu Leu		
885	890	895
Glu Val Gln Arg Gln Lys Glu Leu Met Arg Gln Arg Gln Gln Gln Gln		
900	905	910
Glu Ala Leu Arg Arg Leu Gln Gln Gln Gln Gln Gln Gln Leu Ala		
915	920	925
Gln Met Lys Leu Pro Ser Ser Ser Thr Trp Gly Gln Gln Ser Asn Thr		
930	935	940
Thr Ala Cys Gln Ser Gln Ala Thr Leu Ser Leu Ala Glu Ile Gln Lys		
945	950	955
Leu Glu Glu Glu Arg Glu Arg Gln Leu Arg Glu Glu Gln Arg Arg Gln		
965	970	975
Gln Arg Glu Leu Met Lys Ala Leu Gln Gln Gln Gln Gln Gln Gln		
980	985	990
Gln Lys Leu Ser Gly Trp Gly Asn Val Ser Lys Pro Ser Gly Thr Thr		
995	1000	1005
Lys Ser Leu Leu Glu Ile Gln Gln Glu Glu Ala Arg Gln Met Gln Lys		
1010	1015	1020
Gln Gln Gln Gln Gln Gln His Gln Gln Pro Asn Arg Ala Arg Asn		
1025	1030	1035
Asn Thr His Ser Asn Leu His Thr Ser Ile Gly Asn Ser Val Trp Gly		
1045	1050	1055
Ser Ile Asn Thr Gly Pro Pro Asn Gln Trp Ala Ser Asp Leu Val Ser		
1060	1065	1070
Ser Ile Trp Ser Asn Ala Asp Thr Lys Asn Ser Asn Met Gly Phe Trp		
1075	1080	1085
Asp Asp Ala Val Lys Glu Val Gly Pro Arg Asn Ser Thr Asn Lys Asn		
1090	1095	1100
Lys Asn Asn Ala Ser Leu Ser Lys Ser Val Gly Val Ser Asn Arg Gln		
1105	1110	1115
Asn Lys Lys Val Glu Glu Glu Glu Lys Leu Lys Leu Phe Gln Gly		
1125	1130	1135
Val Asn Lys Ala Gln Asp Gly Phe Thr Gln Trp Cys Glu Gln Met Leu		
1140	1145	1150
His Ala Leu Asn Thr Ala Asn Asn Leu Asp Val Pro Thr Phe Val Ser		
1155	1160	1165
Phe Leu Lys Glu Val Glu Ser Pro Tyr Glu Val His Asp Tyr Ile Arg		
1170	1175	1180
Ala Tyr Leu Gly Asp Thr Ser Glu Ala Lys Glu Phe Ala Lys Gln Phe		
1185	1190	1195
Leu Glu Arg Arg Ala Lys Gln Lys Ala Asn Gln Gln Arg Gln Gln Gln		
1205	1210	1215
Gln Leu Pro Gln Gln Gln Gln Gln Pro Pro Gln Gln Pro Pro Gln Gln		
1220	1225	1230
Pro Gln Gln Gln Asp Ser Val Trp Gly Met Asn His Ser Thr Leu His		
1235	1240	1245
Ser Val Phe Gln Thr Asn Gln Ser Asn Asn Gln Gln Ser Asn Phe Glu		

1250	1255	1260
Ala Val Gln Ser Gly Lys Lys Lys Lys Lys Gln Lys Met Val Arg Ala		
1265	1270	1275
Asp Pro Ser Leu Leu Gly Phe Ser Val Asn Ala Ser Ser Glu Arg Leu		1280
	1285	1290
Asn Met Gly Glu Ile Glu Thr Leu Asp Asp Tyr		1295
1300	1305	1307

<210> 3085
 <211> 1307
 <212> PRT
 <213> Homo sapiens

<400> 3085

Lys Ser Ile Val Lys Ile Arg Lys Arg Met Ala Ala Glu Thr Gln Thr			
1	5	10	15
Leu Asn Phe Gly Pro Glu Trp Leu Arg Ala Leu Ser Ser Gly Gly Ser			
	20	25	30
Ile Thr Ser Pro Pro Leu Ser Pro Ala Leu Pro Lys Tyr Lys Leu Ala			
	35	40	45
Asp Tyr Arg Tyr Gly Arg Glu Glu Met Leu Ala Leu Phe Leu Lys Asp			
	50	55	60
Asn Lys Ile Pro Ser Asp Leu Leu Asp Lys Glu Phe Leu Pro Ile Leu			
	65	70	75
Gln Glu Glu Pro Leu Pro Pro Leu Ala Leu Val Pro Phe Thr Glu Glu			
	85	90	95
Glu Gln Arg Asn Phe Ser Met Ser Val Asn Ser Ala Ala Val Leu Arg			
	100	105	110
Leu Thr Gly Arg Gly Gly Gly Gly Thr Val Val Gly Ala Pro Arg Gly			
	115	120	125
Arg Ser Ser Ser Arg Gly Arg Gly Arg Gly Arg Glu Cys Gly Phe			
	130	135	140
Tyr Gln Arg Ser Phe Asp Glu Val Glu Gly Val Phe Gly Arg Gly Gly			
	145	150	155
Gly Arg Glu Met His Arg Ser Gln Ser Trp Glu Glu Arg Gly Asp Arg			
	165	170	175
Arg Phe Glu Lys Pro Gly Arg Lys Asp Val Gly Arg Pro Asn Phe Glu			
	180	185	190
Glu Gly Gly Pro Thr Ser Val Gly Arg Lys His Glu Phe Ile Arg Ser			
	195	200	205
Glu Ser Glu Asn Trp Arg Ile Phe Arg Glu Glu Gln Asn Gly Glu Asp			
	210	215	220
Glu Asp Gly Gly Trp Arg Leu Ala Gly Ser Arg Arg Asp Gly Glu Arg			
	225	230	235
Trp Arg Pro His Ser Pro Asp Gly Pro Arg Ser Ala Gly Trp Arg Glu			
	245	250	255
His Met Glu Arg Arg Arg Arg Phe Glu Phe Asp Phe Arg Asp Arg Asp			
	260	265	270
Asp Glu Arg Gly Tyr Arg Arg Val Arg Ser Gly Ser Gly Ser Ile Asp			
	275	280	285
Asp Asp Arg Asp Ser Leu Pro Glu Trp Cys Leu Glu Asp Ala Glu Glu			
	290	295	300
Glu Met Gly Thr Phe Asp Ser Ser Gly Ala Phe Leu Ser Leu Lys Lys			
	305	310	315
Val Gln Lys Glu Pro Ile Pro Glu Glu Gln Glu Met Asp Phe Arg Pro			
	325	330	335
Val Asp Glu Gly Glu Glu Cys Ser Asp Ser Glu Gly Ser His Asn Glu			
	340	345	350
Glu Ala Lys Glu Pro Asp Lys Thr Asn Lys Lys Glu Gly Glu Lys Thr			
	355	360	365
Asp Arg Val Gly Val Glu Ala Ser Glu Glu Thr Pro Gln Thr Ser Ser			

4759

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<210> 3086
<211> 219
<212> PRT
<213> Homo sapiens
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4760

1	5	10	15
Leu Ser Met	Ala Leu Ser Trp	Val Leu Thr Val	Leu Ser Leu Leu Pro
20	25	30	
Leu Leu Glu	Ala Gln Ile Pro	Leu Cys Ala Asn	Leu Val Pro Val Pro
35	40	45	
Ile Thr Asn	Ala Thr Leu Asp	Arg Ile Thr Gly	Lys Trp Phe Tyr Ile
50	55	60	
Ala Ser Ala	Phe Arg Asn Glu	Glu Tyr Asn Lys	Ser Val Gln Glu Ile
65	70	75	80
Gln Ala Thr	Phe Phe Tyr Phe	Thr Pro Asn Lys	Thr Glu Asp Thr Ile
85	90	95	
Phe Leu Arg	Glu Tyr Gln Thr	Arg Gln Asp Gln	Cys Ile Tyr Asn Thr
100	105	110	
Thr Tyr Leu	Asn Val Gln Arg	Glu Asn Gly Thr	Ile Ser Arg Tyr Val
115	120	125	
Gly Gly Gln	Glu His Phe Ala	His Leu Leu Ile	Leu Arg Asp Thr Lys
130	135	140	
Thr Tyr Met	Leu Ala Phe Asp	Val Asn Asp Glu	Lys Asn Trp Gly Leu
145	150	155	160
Ser Val Tyr	Ala Asp Lys Pro	Glu Thr Thr Lys	Glu Gln Leu Gly Glu
165	170	175	
Phe Tyr Glu	Ala Leu Asp Cys	Leu Arg Ile Pro	Lys Ser Asp Val Val
180	185	190	
Tyr Thr Asp	Trp Lys Lys Asp	Lys Cys Glu Pro	Leu Glu Lys Gln His
195	200	205	
Glu Lys Glu	Arg Lys Gln Glu	Glu Gly Glu Ser	
210	215	219	

<210> 3087
 <211> 525
 <212> PRT
 <213> Homo sapiens

<400> 3087

Cys Thr Pro	Val Ala Arg	Ser Met Ala	Thr Thr Ala	Thr Cys Thr Arg
1	5	10	15	
Phe Thr Asp	Asp Tyr Gln	Leu Phe Glu	Glu Leu Gly	Lys Gly Ala Phe
20	25	30		
Ser Val Val	Arg Arg Cys	Val Lys Lys	Thr Ser Thr	Gln Glu Tyr Ala
35	40	45		
Ala Lys Ile	Ile Asn Thr	Lys Lys Leu	Ser Ala Arg	Asp His Gln Lys
50	55	60		
Leu Glu Arg	Glu Ala Arg	Ile Cys Arg	Leu Leu Lys	His Pro Asn Ile
65	70	75	80	
Val Arg Leu	His Asp Ser	Ile Ser Glu	Glu Gly Phe	His Tyr Leu Val
85	90	95		
Phe Asp Leu	Val Thr Gly	Gly Glu Leu	Phe Glu Asp	Ile Val Ala Arg
100	105	110		
Glu Tyr Tyr	Ser Glu Ala	Asp Ala Ser	His Cys Ile	His Gln Ile Leu
115	120	125		
Glu Ser Val	Asn His Ile	His Gln His	Asp Ile Val	His Arg Asp Leu
130	135	140		
Lys Pro Glu	Asn Leu Leu	Ala Ser Lys	Cys Lys Gly	Ala Ala Val
145	150	155	160	
Lys Leu Ala	Asp Phe Gly	Leu Ala Ile	Glu Val Gln	Gly Glu Gln Gln
165	170	175		
Ala Trp Phe	Gly Phe Ala	Gly Thr Pro	Gly Tyr Leu	Ser Pro Glu Val
180	185	190		
Leu Arg Lys	Asp Pro Tyr	Gly Lys Pro	Val Asp Ile	Trp Ala Cys Gly
195	200	205		
Val Ile Leu	Tyr Ile Leu	Leu Val Gly	Tyr Pro Pro	Phe Trp Asp Glu

210	215	220
Asp Gln His Lys Leu Tyr	Gln Gln Ile Lys Ala	Gly Ala Tyr Asp Phe
225	230	235
Pro Ser Pro Glu Trp Asp	Thr Val Thr Pro Glu	Ala Lys Asn Leu Ile
245	250	255
Asn Gln Met Leu Thr Ile	Asn Pro Ala Lys Arg	Ile Thr Ala Asp Gln
260	265	270
Ala Leu Lys His Pro Trp	Val Cys Gln Arg Ser	Thr Val Ala Ser Met
275	280	285
Met His Arg Gln Glu Thr	Val Glu Cys Leu Arg	Lys Phe Asn Ala Arg
290	295	300
Arg Lys Leu Lys Gly Ala	Ile Leu Thr Thr Met	Leu Val Ser Arg Asn
305	310	315
Phe Ser Ala Ala Lys Ser	Leu Leu Asn Lys Lys	Ser Asp Gly Gly Val
325	330	335
Lys Pro Gln Ser Asn Asn	Lys Asn Ser Leu Val	Ser Pro Ala Gln Glu
340	345	350
Pro Ala Pro Leu Gln Thr	Ala Met Glu Pro Gln	Thr Thr Val Val His
355	360	365
Asn Ala Thr Asp Gly Ile	Lys Gly Ser Thr Glu	Ser Cys Asn Thr Thr
370	375	380
Thr Glu Asp Glu Asp Leu	Lys Val Arg Lys Gln	Glu Ile Ile Lys Ile
385	390	395
Thr Glu Gln Leu Ile Glu	Ala Ile Asn Asn Gly	Asp Phe Glu Ala Tyr
405	410	415
Thr Lys Ile Cys Asp Pro	Gly Leu Thr Ser Phe	Glu Pro Glu Ala Leu
420	425	430
Gly Asn Leu Val Glu Gly	Met Asp Phe His Lys	Phe Tyr Phe Glu Asn
435	440	445
Leu Leu Ser Lys Asn Ser	Lys Pro Ile His Thr	Thr Ile Leu Asn Pro
450	455	460
His Val His Val Ile Gly	Glu Asp Ala Ala Cys	Ile Ala Tyr Ile Arg
465	470	475
Leu Thr Gln Tyr Ile Asp	Gly Gln Gly Arg Pro	Arg Thr Ser Gln Ser
485	490	495
Glu Glu Thr Arg Val Trp	His Arg Arg Asp Gly	Lys Trp Leu Asn Val
500	505	510
His Tyr His Cys Ser Gly	Ala Pro Ala Ala Pro	Leu Gln
515	520	525

<210> 3088
 <211> 342
 <212> PRT
 <213> Homo sapiens

<400> 3088
 Ser Ser Val Ala Glu Phe Pro Glu Arg Val Gln Leu Ser Gln Pro Gln
 1 5 10 15
 Asn Trp Asn Phe Ser Gly Ala Gly Gly Ala Trp Ser Leu Asp Phe Ala
 20 25 30
 Glu Gln Leu Lys Trp Ser Ala Glu Leu Ala Arg Leu Gly Glu Ser Ile
 35 40 45
 Met Asp Gly Lys Gln Gly Gly Met Asp Gly Ser Lys Pro Ala Gly Pro
 50 55 60
 Arg Asp Phe Pro Gly Ile Arg Leu Leu Ser Asn Pro Leu Met Gly Asp
 65 70 75 80
 Ala Val Ser Asp Trp Ser Pro Met His Glu Ala Ala Ile His Gly His
 85 90 95
 Gln Leu Ser Leu Arg Asn Leu Ile Ser Gln Gly Trp Ala Val Asn Ile
 100 105 110
 Ile Thr Ala Asp His Val Ser Pro Leu His Glu Ala Cys Leu Gly Gly

115	120	125
His Leu Ser Cys Val Lys Ile	Leu Leu Lys His Gly Ala Gln Val Asn	
130	135	140
Gly Val Thr Ala Asp Trp His Thr Pro Leu Phe Asn Ala Cys Val Ser		
145	150	155
Gly Ser Trp Asp Cys Val Asn Leu Leu Leu Gln His Gly Ala Ser Val		
165	170	175
Gln Pro Glu Ser Asp Leu Ala Ser Pro Ile His Glu Ala Ala Arg Arg		
180	185	190
Gly His Val Glu Cys Val Asn Ser Leu Ile Ala Tyr Gly Gly Asn Ile		
195	200	205
Asp His Lys Ile Ser His Leu Gly Thr Pro Leu Tyr Leu Ala Cys Glu		
210	215	220
Asn Gln Gln Arg Ala Cys Val Lys Lys Leu Leu Glu Ser Gly Ala Asp		
225	230	235
Val Asn Gln Gly Lys Gly Gln Asp Ser Pro Leu His Ala Val Ala Arg		
245	250	255
Thr Ala Ser Glu Glu Leu Ala Cys Leu Leu Met Asp Phe Gly Ala Asp		
260	265	270
Thr Gln Ala Lys Asn Ala Glu Gly Lys Arg Pro Val Glu Leu Val Pro		
275	280	285
Pro Glu Ser Pro Leu Ala Gln Leu Phe Leu Glu Arg Glu Gly Pro Pro		
290	295	300
Ser Leu Met Gln Leu Cys Arg Leu Arg Ile Arg Lys Cys Phe Gly Ile		
305	310	315
Gln Gln His His Lys Ile Thr Lys Leu Val Leu Pro Glu Asp Leu Lys		
325	330	335
Gln Phe Leu Leu His Leu		
340	342	

<210> 3089
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 3089
Asp Met Ala Gly Leu Met Thr Ile Val Thr Ser Leu Leu Phe Leu Gly
1 5 10 15
Val Cys Ala His Ile Ile Pro Thr Gly Ser Val Val Leu Pro Ser
20 25 30
Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn Arg Val
35 40 45
Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala Gly Val
50 55 60
Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro Lys Gln
65 70 75 80
Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln Lys Lys
85 90 95
Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro Val Gln Arg
100 105 110
Tyr Pro Gly Asn Gln Thr Thr Cys
115 120

<210> 3090
 <211> 1338
 <212> PRT
 <213> Homo sapiens

<400> 3090

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Leu Met Glu Ala Gly Gly Gly Gly Gly Ala Leu Pro Ala Gly Val Glu
 1          5          10          15
Thr Met Val Leu Thr Leu Gly Glu Ser Trp Pro Val Leu Val Gly Arg
 20          25          30
Arg Phe Leu Ser Leu Ser Ala Ala Asp Gly Ser Asp Gly Ser His Asp
 35          40          45
Ser Trp Asp Val Glu Arg Val Ala Glu Trp Pro Trp Leu Ser Gly Thr
 50          55          60
Ile Arg Ala Val Ser His Thr Asp Val Thr Lys Lys Asp Leu Lys Val
 65          70          75          80
Cys Val Glu Phe Asp Gly Glu Ser Trp Arg Lys Arg Arg Trp Ile Glu
 85          90          95
Val Tyr Ser Leu Leu Arg Arg Ala Phe Leu Val Glu His Asn Leu Val
 100         105         110
Leu Ala Glu Arg Lys Ser Pro Glu Ile Ser Glu Arg Ile Val Gln Trp
 115         120         125
Pro Ala Ile Thr Tyr Lys Pro Leu Leu Asp Lys Ala Gly Leu Gly Ser
 130         135         140
Ile Thr Ser Val Arg Phe Leu Gly Asp Gln Gln Arg Val Phe Leu Ser
 145         150         155         160
Lys Asp Leu Leu Lys Pro Ile Gln Asp Val Asn Ser Leu Arg Leu Ser
 165         170         175
Leu Thr Asp Asn Gln Ile Val Ser Lys Glu Phe Gln Ala Leu Ile Val
 180         185         190
Lys His Leu Asp Glu Ser His Leu Leu Lys Gly Asp Lys Asn Leu Val
 195         200         205
Gly Ser Glu Val Lys Ile Tyr Ser Leu Asp Pro Ser Thr Gln Trp Phe
 210         215         220
Ser Ala Thr Val Val Asn Gly Asn Pro Ala Ser Lys Thr Leu Gln Val
 225         230         235         240
Asn Cys Glu Glu Ile Pro Ala Leu Lys Ile Val Asp Pro Ser Leu Ile
 245         250         255
His Val Glu Val Val His Asp Asn Leu Val Thr Cys Gly Asn Ser Ala
 260         265         270
Arg Ile Gly Ala Val Lys Arg Lys Ser Ser Glu Asn Asn Gly Thr Leu
 275         280         285
Val Ser Lys Gln Ala Lys Ser Cys Ser Glu Ala Ser Pro Ser Met Cys
 290         295         300
Pro Val Gln Ser Val Pro Thr Thr Val Phe Lys Glu Ile Leu Leu Gly
 305         310         315         320
Cys Thr Ala Ala Thr Pro Pro Ser Lys Asp Pro Arg Gln Gln Ser Thr
 325         330         335
Pro Gln Ala Ala Asn Ser Pro Pro Asn Leu Gly Ala Lys Ile Pro Gln
 340         345         350
Gly Cys His Lys Gln Ser Leu Pro Glu Glu Ile Ser Ser Cys Leu Asn
 355         360         365
Thr Lys Ser Glu Ala Leu Arg Thr Lys Pro Asp Val Cys Lys Ala Gly
 370         375         380
Leu Leu Ser Lys Ser Ser Gln Ile Gly Thr Gly Asp Leu Lys Ile Leu
 385         390         395         400
Thr Glu Pro Lys Gly Ser Cys Thr Gln Pro Lys Thr Asn Thr Asp Gln
 405         410         415
Glu Asn Arg Leu Glu Ser Val Pro Gln Ala Leu Thr Gly Leu Pro Lys
 420         425         430
Glu Cys Leu Pro Thr Lys Ala Ser Ser Lys Ala Glu Leu Glu Ile Ala
 435         440         445
Asn Pro Pro Glu Leu Gln Lys His Leu Glu His Ala Pro Ser Pro Ser
 450         455         460
Asp Val Ser Asn Ala Pro Glu Val Lys Ala Gly Val Asn Ser Asp Ser
 465         470         475         480
Pro Asn Asn Cys Ser Gly Lys Lys Val Glu Pro Ser Ala Leu Ala Cys
 485         490         495
Arg Ser Gln Asn Leu Lys Glu Ser Ser Val Lys Val Asp Asn Glu Ser

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500										505					510							
Cys	Cys	Ser	Arg	Ser	Asn	Asn	Lys	Ile	Gln	Asn	Ala	Pro	Ser	Arg	Lys							
		515					520					525										
Ser	Val	Leu	Thr	Asp	Pro	Ala	Lys	Leu	Lys	Lys	Leu	Gln	Gln	Ser	Gly							
		530					535					540										
Glu	Ala	Phe	Val	Gln	Asp	Asp	Ser	Cys	Val	Asn	Ile	Val	Ala	Gln	Leu							
545					550					555					560							
Pro	Lys	Cys	Arg	Glu	Cys	Arg	Leu	Asp	Ser	Leu	Arg	Lys	Asp	Lys	Glu							
				565					570						575							
Gln	Gln	Lys	Asp	Ser	Pro	Val	Phe	Cys	Arg	Phe	Phe	His	Phe	Arg	Arg							
			580					585						590								
Leu	Gln	Phe	Asn	Lys	His	Gly	Val	Leu	Arg	Val	Glu	Gly	Phe	Leu	Thr							
			595				600							605								
Pro	Asn	Lys	Tyr	Asp	Asn	Glu	Ala	Ile	Gly	Leu	Trp	Leu	Pro	Leu	Thr							
		610					615					620										
Lys	Asn	Val	Val	Gly	Ile	Asp	Leu	Asp	Thr	Ala	Lys	Tyr	Ile	Leu	Ala							
625					630					635					640							
Asn	Ile	Gly	Asp	His	Phe	Cys	Gln	Met	Val	Ile	Ser	Glu	Lys	Glu	Ala							
				645					650						655							
Met	Ser	Thr	Ile	Glu	Pro	His	Arg	Gln	Val	Ala	Trp	Lys	Arg	Ala	Val							
			660					665							670							
Lys	Gly	Val	Arg	Glu	Met	Cys	Asp	Val	Cys	Asp	Thr	Thr	Ile	Phe	Asn							
			675				680								685							
Leu	His	Trp	Val	Cys	Pro	Arg	Cys	Gly	Phe	Gly	Val	Cys	Val	Asp	Cys							
			690				695								700							
Tyr	Arg	Met	Lys	Arg	Lys	Asn	Cys	Gln	Gln	Gly	Ala	Ala	Tyr	Lys	Thr							
705					710					715					720							
Phe	Ser	Trp	Leu	Lys	Cys	Val	Lys	Ser	Gln	Ile	His	Glu	Pro	Glu	Asn							
				725					730						735							
Leu	Met	Pro	Thr	Gln	Ile	Ile	Pro	Gly	Lys	Ala	Leu	Tyr	Asp	Val	Gly							
			740					745							750							
Asp	Ile	Val	His	Ser	Val	Arg	Ala	Lys	Trp	Gly	Ile	Lys	Ala	Asn	Cys							
			755				760								765							
Pro	Cys	Ser	Asn	Arg	Gln	Phe	Lys	Leu	Phe	Ser	Lys	Pro	Ala	Ser	Lys							
			770				775								780							
Glu	Asp	Leu	Lys	Gln	Thr	Ser	Leu	Ala	Gly	Glu	Lys	Pro	Thr	Leu	Gly							
785					790					795					800							
Ala	Val	Leu	Gln	Gln	Asn	Pro	Ser	Val	Leu	Glu	Pro	Ala	Ala	Val	Gly							
				805					810						815							
Gly	Glu	Ala	Ala	Ser	Lys	Pro	Ala	Gly	Ser	Met	Lys	Pro	Ala	Cys	Pro							
			820					825							830							
Ala	Ser	Thr	Ser	Pro	Leu	Asn	Trp	Leu	Ala	Asp	Leu	Thr	Ser	Gly	Asn							
			835				840								845							
Val	Asn	Lys	Glu	Asn	Lys	Glu	Lys	Gln	Pro	Thr	Met	Pro	Ile	Leu	Lys							
			850				855								860							
Asn	Glu	Ile	Lys	Cys	Leu	Pro	Pro	Leu	Pro	Pro	Leu	Ser	Lys	Ser	Ser							
865					870					875					880							
Thr	Val	Leu	His	Thr	Phe	Asn	Ser	Thr	Ile	Leu	Thr	Pro	Val	Ser	Asn							
				885					890						895							
Asn	Asn	Ser	Gly	Phe	Leu	Arg	Asn	Leu	Leu	Asn	Ser	Ser	Thr	Gly	Lys							
			900					905							910							
Thr	Glu	Asn	Gly	Leu	Lys	Asn	Thr	Pro	Lys	Ile	Leu	Asp	Asp	Ile	Phe							
			915				920								925							
Ala	Ser	Leu	Val	Gln	Asn	Lys	Thr	Thr	Ser	Asp	Leu	Ser	Lys	Arg	Pro							
			930				935								940							
Gln	Gly	Leu	Thr	Ile	Lys	Pro	Ser	Ile	Leu	Gly	Phe	Asp	Thr	Pro	His							
945					950					955					960							
Tyr	Trp	Leu	Cys	Asp	Asn	Arg	Leu	Leu	Cys	Leu	Gln	Asp	Pro	Asn	Asn							
				965					970						975							
Lys	Ser	Asn	Trp	Asn	Val	Phe	Arg	Glu	Cys	Trp	Lys	Gln	Gly	Gln	Pro							
			980					985							990							
Val	Met	Val	Ser	Gly	Val	His	His	Lys	Leu	Asn	Ser	Glu	Leu	Trp	Lys							
			995				1000								1005							
Pro	Glu	Ser	Phe	Arg	Lys	Glu	Phe	Gly	Glu	Gln	Glu	Val	Asp	Leu	Val							

1010	1015	1020
Asn Cys Arg Thr	Asn Glu Ile Ile Thr Gly Ala Thr Val Gly Asp Phe	
1025	1030	1035
Trp Asp Gly Phe	Glu Asp Val Pro Asn Arg Leu Lys Asn Glu Lys Glu	1040
	1045	1050
Pro Met Val Leu	Lys Leu Lys Asp Trp Pro Pro Gly Glu Asp Phe Arg	1055
	1060	1065
Asp Met Met Pro	Ser Arg Phe Asp Asp Leu Met Ala Asn Ile Pro Leu	1070
	1075	1080
Pro Glu Tyr Thr	Arg Arg Asp Gly Lys Leu Asn Leu Ala Ser Arg Leu	1085
	1090	1095
Pro Asn Tyr Phe	Val Arg Pro Asp Leu Gly Pro Lys Met Tyr Asn Ala	1100
1105	1110	1115
Tyr Gly Leu Ile	Thr Pro Glu Asp Arg Lys Tyr Gly Thr Thr Asn Leu	1120
	1125	1130
His Leu Asp Val	Ser Asp Ala Ala Asn Val Met Val Tyr Val Gly Ile	1135
	1140	1145
Pro Lys Gly Gln	Cys Glu Gln Glu Glu Glu Val Leu Lys Thr Ile Gln	1150
	1155	1160
Asp Gly Asp Ser	Asp Glu Leu Thr Ile Lys Arg Phe Ile Glu Gly Lys	1165
	1170	1175
Glu Lys Pro Gly	Ala Leu Trp His Ile Tyr Ala Ala Lys Asp Thr Glu	1180
1185	1190	1195
Lys Ile Arg Glu	Phe Leu Lys Lys Val Ser Glu Glu Gln Gly Gln Glu	1200
	1205	1210
Asn Pro Ala Asp	His Asp Pro Ile His Asp Gln Ser Trp Tyr Leu Asp	1215
	1220	1225
Arg Ser Leu Arg	Lys Arg Leu His Gln Glu Tyr Gly Val Gln Gly Trp	1230
	1235	1240
Ala Ile Val Gln	Phe Leu Gly Asp Val Val Phe Ile Pro Ala Gly Ala	1245
	1250	1255
Pro His Gln Val	His Asn Leu Tyr Ser Cys Ile Lys Val Ala Glu Asp	1260
1265	1270	1275
Phe Val Ser Pro	Glu His Val Lys His Cys Phe Trp Leu Thr Gln Glu	1280
	1285	1290
Phe Arg Tyr Leu	Ser Gln Thr His Thr Asn His Glu Asp Lys Leu Gln	1295
	1300	1305
Val Lys Asn Val	Ile Tyr His Ala Val Lys Asp Ala Val Ala Met Leu	1310
	1315	1320
Lys Ala Ser Glu	Ser Ser Phe Gly Lys Pro	1325
	1330	1335
		1338

<210> 3091
 <211> 580
 <212> PRT
 <213> Homo sapiens

<400> 3091
 Lys Arg Gly Ala Arg Arg Gly Gly Trp Lys Arg Lys Met Pro Ser Thr
 1 5 10 15
 Asp Leu Leu Met Leu Lys Ala Phe Glu Pro Tyr Leu Glu Ile Leu Glu
 20 25 30
 Val Tyr Ser Thr Lys Ala Lys Asn Tyr Val Asn Gly His Cys Thr Lys
 35 40 45
 Tyr Glu Pro Trp Gln Leu Ile Ala Trp Ser Val Val Trp Thr Leu Leu
 50 55 60
 Ile Val Trp Gly Tyr Glu Phe Val Phe Gln Pro Glu Ser Leu Trp Ser
 65 70 75 80
 Arg Phe Lys Lys Lys Cys Phe Lys Leu Thr Arg Lys Met Pro Ile Ile
 85 90 95
 Gly Arg Lys Ile Gln Asp Lys Leu Asn Lys Thr Lys Asp Asp Ile Ser

			100					105					110				
Lys	Asn	Met	Ser	Phe	Leu	Lys	Val	Asp	Lys	Glu	Tyr	Val	Lys	Ala	Leu		
		115					120					125					
Pro	Ser	Gln	Gly	Leu	Ser	Ser	Ser	Ala	Val	Leu	Glu	Lys	Leu	Lys	Glu		
		130				135						140					
Tyr	Ser	Ser	Met	Asp	Ala	Phe	Trp	Gln	Glu	Gly	Arg	Ala	Ser	Gly	Thr		
145					150					155					160		
Val	Tyr	Ser	Gly	Glu	Lys	Leu	Thr	Glu	Leu	Leu	Val	Lys	Ala	Tyr			
			165				170							175			
Gly	Asp	Phe	Ala	Trp	Ser	Asn	Pro	Leu	His	Pro	Asp	Ile	Phe	Pro	Gly		
			180				185						190				
Leu	Arg	Lys	Ile	Glu	Ala	Glu	Ile	Val	Arg	Ile	Ala	Cys	Ser	Leu	Phe		
		195				200						205					
Asn	Gly	Gly	Pro	Asp	Ser	Cys	Gly	Cys	Val	Thr	Ser	Gly	Gly	Thr	Glu		
		210				215						220					
Ser	Ile	Leu	Met	Ala	Cys	Lys	Ala	Tyr	Arg	Asp	Leu	Ala	Phe	Glu	Lys		
225					230					235					240		
Gly	Ile	Lys	Thr	Pro	Glu	Ile	Val	Ala	Pro	Gln	Ser	Ala	His	Ala	Ala		
				245					250					255			
Phe	Asn	Lys	Ala	Ala	Ser	Tyr	Phe	Gly	Met	Lys	Ile	Val	Arg	Val	Pro		
		260					265						270				
Leu	Thr	Lys	Met	Met	Glu	Val	Asp	Val	Arg	Ala	Met	Arg	Arg	Ala	Ile		
		275					280					285					
Ser	Arg	Asn	Thr	Ala	Met	Leu	Val	Cys	Ser	Thr	Pro	Gln	Phe	Pro	His		
		290				295					300						
Gly	Val	Ile	Asp	Pro	Val	Pro	Glu	Val	Ala	Lys	Leu	Ala	Val	Lys	Tyr		
305					310					315					320		
Lys	Ile	Pro	Leu	His	Val	Asp	Ala	Cys	Leu	Gly	Gly	Phe	Leu	Ile	Val		
				325					330					335			
Phe	Met	Glu	Lys	Ala	Gly	Tyr	Pro	Leu	Glu	His	Pro	Phe	Asp	Phe	Arg		
		340					345					350					
Val	Lys	Gly	Val	Thr	Ser	Ile	Ser	Ala	Asp	Thr	His	Lys	Tyr	Gly	Tyr		
		355					360					365					
Ala	Pro	Lys	Gly	Ser	Ser	Leu	Val	Leu	Tyr	Ser	Asp	Lys	Lys	Tyr	Arg		
		370				375					380						
Asn	Tyr	Gln	Phe	Phe	Val	Asp	Thr	Asp	Trp	Gln	Gly	Gly	Ile	Tyr	Ala		
385					390					395					400		
Ser	Pro	Thr	Ile	Ala	Gly	Ser	Arg	Pro	Gly	Gly	Ile	Ser	Ala	Ala	Cys		
				405					410					415			
Trp	Ala	Ala	Leu	Met	His	Phe	Gly	Glu	Asn	Gly	Tyr	Val	Glu	Ala	Thr		
			420				425						430				
Lys	Gln	Ile	Lys	Thr	Ala	Arg	Phe	Leu	Lys	Ser	Glu	Leu	Glu	Asn			
		435				440					445						
Ile	Lys	Gly	Ile	Phe	Val	Phe	Gly	Asn	Pro	Gln	Leu	Ser	Val	Ile	Ala		
		450				455					460						
Leu	Gly	Ser	Arg	Asp	Phe	Asp	Ile	Tyr	Arg	Leu	Ser	Asn	Leu	Met	Thr		
465					470					475					480		
Ala	Lys	Gly	Trp	Asn	Leu	Asn	Gln	Leu	Gln	Phe	Pro	Pro	Ser	Ile	His		
				485					490					495			
Phe	Cys	Ile	Thr	Leu	Leu	His	Ala	Arg	Lys	Arg	Val	Ala	Ile	Gln	Phe		
			500					505					510				
Leu	Lys	Asp	Ile	Arg	Glu	Ser	Val	Thr	Gln	Ile	Met	Lys	Asn	Pro	Lys		
		515					520					525					
Ala	Lys	Thr	Thr	Gly	Met	Gly	Ala	Ile	Tyr	Gly	Met	Ala	Gln	Thr	Thr		
		530				535					540						
Val	Asp	Arg	Asn	Met	Gly	Ala	Glu	Leu	Ser	Ser	Val	Phe	Leu	Asp	Ser		
545					550					555					560		
Leu	Tyr	Ser	Thr	Asp	Thr	Val	Thr	Gln	Gly	Ser	Gln	Met	Asn	Gly	Ser		
				565					570					575			
Pro	Lys	Pro	His														
			580														

<210> 3092
 <211> 858
 <212> PRT
 <213> Homo sapiens

<400> 3092

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Leu Cys Ser Gln Asn Ser Pro Glu Asp Trp Val Asn Phe Ser Ser Glu
 1           5           10           15
Lys Gln Lys Arg Tyr Pro Trp Tyr Trp Thr Gly Arg Lys Leu Arg Ser
      20           25           30
Glu Arg Ala Met Lys Ile Gln Lys Lys Leu Thr Gly Cys Ser Arg Leu
      35           40           45
Met Leu Leu Cys Leu Ser Leu Glu Leu Leu Leu Glu Ala Gly Ala Gly
      50           55           60
Asn Ile His Tyr Ser Val Pro Glu Glu Thr Asp Lys Gly Ser Phe Val
      65           70           75           80
Gly Asn Ile Ala Lys Asp Leu Gly Leu Gln Pro Gln Glu Leu Ala Asp
      85           90           95
Gly Gly Val Arg Ile Val Ser Arg Gly Arg Met Pro Leu Phe Ala Leu
      100          105          110
Asn Pro Arg Ser Gly Ser Leu Ile Thr Ala Arg Arg Ile Asp Arg Glu
      115          120          125
Glu Leu Cys Ala Gln Ser Met Pro Cys Leu Val Ser Phe Asn Ile Leu
      130          135          140
Val Glu Asp Lys Met Lys Leu Phe Pro Val Glu Val Glu Ile Ile Asp
      145          150          155          160
Ile Asn Asp Asn Thr Pro Gln Phe Gln Leu Glu Glu Leu Glu Phe Lys
      165          170          175
Met Asn Glu Ile Thr Thr Pro Gly Thr Arg Val Ser Leu Pro Phe Gly
      180          185          190
Gln Asp Leu Asp Val Gly Met Asn Ser Leu Gln Ser Tyr Gln Leu Ser
      195          200          205
Ser Asn Pro His Phe Ser Leu Asp Val Gln Gln Gly Ala Asp Gly Pro
      210          215          220
Gln His Pro Glu Met Val Leu Gln Ser Pro Leu Asp Arg Glu Glu Glu
      225          230          235          240
Ala Val His His Leu Ile Leu Thr Ala Ser Asp Gly Gly Glu Pro Val
      245          250          255
Arg Ser Gly Thr Leu Arg Ile Tyr Ile Gln Val Val Asp Ala Asn Asp
      260          265          270
Asn Pro Pro Ala Phe Thr Gln Ala Gln Tyr His Ile Asn Val Pro Glu
      275          280          285
Asn Val Pro Leu Gly Thr Gln Leu Leu Met Val Asn Ala Thr Asp Pro
      290          295          300
Asp Glu Gly Ala Asn Gly Glu Val Thr Tyr Ser Phe His Asn Val Asp
      305          310          315          320
His Arg Val Ala Gln Ile Phe Arg Leu Asp Ser Tyr Thr Gly Glu Ile
      325          330          335
Ser Asn Lys Glu Pro Leu Asp Phe Glu Glu Tyr Lys Met Tyr Ser Met
      340          345          350
Glu Val Gln Ala Gln Asp Gly Ala Gly Leu Met Ala Lys Val Lys Val
      355          360          365
Leu Ile Lys Val Leu Asp Val Asn Asp Asn Ala Pro Glu Val Thr Ile
      370          375          380
Thr Ser Val Thr Thr Ala Val Pro Glu Asn Phe Pro Pro Gly Thr Ile
      385          390          395          400
Ile Ala Leu Ile Ser Val His Asp Gln Asp Ser Gly Asp Asn Gly Tyr
      405          410          415
Thr Thr Cys Phe Ile Pro Gly Asn Leu Pro Phe Lys Leu Glu Lys Leu
      420          425          430
Val Asp Asn Tyr Tyr Arg Leu Val Thr Glu Arg Thr Leu Asp Arg Glu
      435          440          445
Leu Ile Ser Gly Tyr Asn Ile Thr Ile Thr Ala Ile Asp Gln Gly Thr

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450	455	460
Pro Ala Leu Ser Thr Glu	Thr His Ile Ser Leu	Leu Val Thr Asp Ile
465	470	475
Asn Asp Asn Ser Pro Val	Phe His Gln Asp Ser	Tyr Ser Ala Tyr Ile
485	490	495
Pro Glu Asn Asn Pro Arg	Gly Ala Ser Ile Phe	Ser Val Arg Ala His
500	505	510
Asp Leu Asp Ser Asn Glu	Asn Ala Gln Ile Thr	Tyr Ser Leu Ile Glu
515	520	525
Asp Thr Ile Gln Gly Ala	Pro Leu Ser Ala Tyr	Leu Ser Ile Asn Ser
530	535	540
Asp Thr Gly Val Leu Tyr	Ala Leu Arg Ser Phe	Asp Tyr Glu Gln Phe
545	550	555
Arg Asp Met Gln Leu Lys	Val Met Ala Arg Asp	Ser Gly Asp Pro Pro
565	570	575
Leu Ser Ser Asn Val Ser	Leu Ser Leu Phe Leu	Leu Asp Gln Asn Asp
580	585	590
Asn Ala Pro Glu Ile Leu	Tyr Pro Ala Leu Pro	Thr Asp Gly Ser Thr
595	600	605
Gly Val Glu Leu Ala Pro	Arg Ser Ala Glu Pro	Gly Tyr Leu Val Thr
610	615	620
Lys Val Val Ala Val Asp	Arg Asp Ser Gly Gln	Asn Ala Trp Leu Ser
625	630	635
Tyr Arg Leu Leu Lys Ala	Ser Glu Pro Gly Leu	Phe Ser Val Gly Leu
645	650	655
His Thr Gly Glu Val Arg	Thr Ala Arg Ala Leu	Leu Asp Arg Asp Ala
660	665	670
Leu Lys Gln Ser Leu Val	Val Ala Val Gln Asp	His Gly Gln Pro Pro
675	680	685
Leu Ser Ala Thr Val Thr	Leu Thr Val Ala Val	Ala Asp Arg Ile Pro
690	695	700
Asp Ile Leu Ala Asp Leu	Gly Ser Leu Glu Pro	Ser Ala Lys Pro Asn
705	710	715
Asp Ser Asp Leu Thr Leu	Tyr Leu Val Val Ala	Glu Ala Ala Val Ser
725	730	735
Cys Val Phe Leu Ala Phe	Val Ile Val Leu Leu	Ala His Arg Leu Arg
740	745	750
Arg Trp His Lys Ser Arg	Leu Leu Gln Ala Ser	Gly Gly Gly Leu Ala
755	760	765
Ser Thr Pro Gly Ser His	Phe Val Gly Val Asp	Gly Val Arg Ala Phe
770	775	780
Leu Gln Thr Tyr Ser His	Glu Val Ser Leu Thr	Ala Asp Ser Arg Lys
785	790	795
Ser His Leu Ile Phe Pro	Gln Pro Asn Tyr Ala	Asp Thr Leu Ile Ser
805	810	815
Gln Glu Ser Cys Glu Lys	Lys Gly Phe Leu Ser	Ala Pro Gln Ser Leu
820	825	830
Leu Glu Asp Lys Lys Glu	Pro Phe Ser Gln Val	Asn Phe Cys Asp Glu
835	840	845
Cys Ile Ser Tyr Leu Glu	Lys Asn Asn Ser	
850	855	858

<210> 3093

<211> 1289

<212> PRT

<213> Homo sapiens

<400> 3093

Pro	Pro	Asp	Asn	Gln	Lys	Leu	Gly	Leu	Leu	Glu	Ala	Leu	Leu	Lys	Ile
1				5						10				15	
Gly	Asp	Trp	Gln	His	Ala	Gln	Asn	Ile	Met	Asp	Gln	Met	Pro	Pro	Tyr

4770

530		535		540
Tyr Ile Thr Ser Cys Glu Met Val Met Ala Pro Val His Glu Ala Val				
545		550		555
Val Ser Leu His Val Ser Lys Val Trp Asp Asp Ile Ser Pro Gln Phe				560
	565		570	
Tyr Ala Thr Phe Trp Ser Leu Thr Met Tyr Asp Leu Ala Val Pro His				575
	580		585	
Thr Ser Tyr Glu Arg Glu Val Asn Lys Leu Lys Val Gln Met Lys Ala				590
	595		600	
Ile Asp Asp Asn Gln Glu Met Pro Pro Asn Lys Lys Lys Lys Glu Lys				605
	610		615	
Glu Arg Cys Thr Ala Leu Gln Asp Lys Leu Leu Glu Glu Glu Lys Lys				620
	625		630	
Gln Met Glu His Val Gln Arg Val Leu Gln Arg Leu Lys Leu Glu Lys				635
	645		650	
Asp Asn Trp Leu Leu Ala Lys Ser Thr Lys Asn Glu Thr Ile Thr Lys				655
	660		665	
Phe Leu Gln Leu Cys Ile Phe Pro Arg Cys Ile Phe Ser Ala Ile Asp				670
	675		680	
Ala Val Tyr Cys Ala Arg Phe Val Glu Leu Val His Gln Gln Lys Thr				685
	690		695	
Pro Asn Phe Ser Thr Leu Cys Tyr Asp Arg Val Phe Ser Asp Ile				700
	705		710	
Ile Tyr Thr Val Ala Ser Cys Thr Glu Asn Glu Ala Ser Arg Tyr Gly				715
	725		730	
Arg Phe Leu Cys Cys Met Leu Glu Thr Val Thr Arg Trp His Ser Asp				720
	740		745	
Arg Ala Thr Tyr Glu Lys Glu Cys Gly Asn Tyr Pro Gly Phe Leu Thr				735
	755		760	
Ile Leu Arg Ala Thr Gly Phe Asp Gly Gly Asn Lys Ala Asp Gln Leu				740
	770		775	
Asp Tyr Glu Asn Phe Arg His Val Val His Lys Trp His Tyr Lys Leu				780
	785		790	
Thr Lys Ala Ser Val His Cys Leu Glu Thr Gly Glu Tyr Thr His Ile				795
	805		810	
Arg Asn Ile Leu Ile Val Leu Thr Lys Ile Leu Pro Trp Tyr Pro Lys				800
	820		825	
Val Leu Asn Leu Gly Gln Ala Leu Glu Arg Arg Val His Lys Ile Cys				815
	835		840	
Gln Glu Glu Lys Glu Lys Arg Pro Asp Leu Tyr Ala Leu Ala Met Gly				830
	850		855	
Tyr Ser Gly Gln Leu Lys Ser Arg Lys Ser Tyr Met Ile Pro Glu Asn				845
	865		870	
Glu Phe His His Lys Asp Pro Pro Pro Arg Asn Ala Val Ala Ser Val				860
	885		890	
Gln Asn Gly Pro Gly Gly Gly Pro Ser Ser Ser Ser Ile Gly Ser Ala				875
	900		905	
Ser Lys Ser Asp Glu Ser Ser Thr Glu Glu Thr Asp Lys Ser Arg Glu				880
	915		920	
Arg Ser Gln Cys Gly Val Lys Ala Val Asn Lys Ala Ser Ser Thr Thr				895
	930		935	
Pro Lys Gly Asn Ser Ser Asn Gly Asn Ser Gly Ser Asn Ser Asn Lys				900
	945		950	
Ala Val Lys Glu Asn Asp Lys Glu Lys Gly Lys Glu Lys Glu Lys Glu				910
	965		970	
Lys Lys Glu Lys Thr Pro Ala Thr Thr Pro Glu Ala Arg Val Leu Gly				925
	980		985	
Lys Asp Gly Lys Glu Lys Pro Lys Glu Glu Arg Pro Asn Lys Asp Glu				930
	995		1000	
Lys Ala Arg Glu Thr Lys Glu Arg Thr Pro Lys Ser Asp Lys Glu Lys				940
	1010		1015	
Glu Lys Phe Lys Lys Glu Glu Lys Ala Lys Asp Glu Lys Phe Lys Thr				950
	1025		1030	
Thr Val Pro Asn Ala Glu Ser Lys Ser Thr Gln Glu Arg Glu Arg Glu				960
			1035	
				975
				980
				990
				1005
				1020
				1040

1045 1050 1055
 Lys Glu Pro Ser Arg Glu Arg Asp Ile Ala Lys Glu Met Lys Ser Lys
 1060 1065 1070
 Glu Asn Val Lys Gly Gly Glu Lys Thr Pro Val Ser Gly Ser Leu Lys
 1075 1080 1085
 Ser Pro Val Pro Arg Ser Asp Ile Pro Glu Pro Glu Arg Glu Gln Lys
 1090 1095 1100
 Arg Arg Lys Ile Asp Thr His Pro Ser Pro Ser His Ser Ser Thr Val
 1105 1110 1115 1120
 Lys Asp Ser Leu Ile Glu Leu Lys Glu Ser Ser Ala Lys Leu Tyr Ile
 1125 1130 1135
 Asn His Thr Pro Pro Pro Leu Ser Lys Ser Lys Glu Arg Glu Met Asp
 1140 1145 1150
 Lys Lys Asp Leu Asp Lys Ser Arg Glu Arg Ser Arg Glu Arg Glu Lys
 1155 1160 1165
 Lys Asp Glu Lys Asp Arg Lys Glu Arg Lys Arg Asp His Ser Asn Asn
 1170 1175 1180
 Asp Arg Glu Val Pro Pro Asp Leu Thr Lys Arg Arg Lys Glu Glu Asn
 1185 1190 1195 1200
 Gly Thr Met Gly Val Ser Lys His Lys Ser Glu Ser Pro Cys Glu Ser
 1205 1210 1215
 Pro Tyr Pro Asn Glu Lys Asp Lys Glu Lys Asn Lys Ser Lys Ser Ser
 1220 1225 1230
 Gly Lys Glu Lys Gly Ser Asp Ser Phe Lys Ser Glu Lys Met Asp Lys
 1235 1240 1245
 Ile Ser Ser Gly Gly Lys Lys Glu Ser Arg His Asp Lys Glu Lys Ile
 1250 1255 1260
 Glu Lys Lys Glu Lys Arg Asp Ser Ser Gly Gly Lys Glu Glu Lys Lys
 1265 1270 1275 1280
 His His Lys Ser Ser Asp Lys His Arg
 1285 1289

<210> 3094
 <211> 296
 <212> PRT
 <213> Homo sapiens

<400> 3094
 Ala Met Leu Gly Thr Arg Glu Pro Ser Arg Arg Gly Ala Gly Ala Val
 1 5 10 15
 Gln Ala Glu Val Ser Glu Arg Leu Ala Met Ala Gly Pro Gln Gln Gln
 20 25 30
 Pro Pro Tyr Leu His Leu Ala Glu Leu Thr Ala Ser Gln Phe Leu Glu
 35 40 45
 Ile Trp Lys His Phe Asp Ala Asp Gly Asn Gly Tyr Ile Glu Gly Lys
 50 55 60
 Glu Leu Glu Asn Phe Phe Gln Glu Leu Glu Lys Ala Arg Lys Gly Ser
 65 70 75 80
 Gly Met Met Ser Lys Ser Asp Asn Phe Gly Glu Lys Met Lys Glu Phe
 85 90 95
 Met Gln Lys Tyr Asp Lys Asn Ser Asp Gly Lys Ile Glu Met Ala Glu
 100 105 110
 Leu Ala Gln Ile Leu Pro Thr Glu Glu Asn Phe Leu Leu Cys Phe Arg
 115 120 125
 Gln His Val Gly Ser Ser Ala Glu Phe Met Glu Ala Trp Arg Lys Tyr
 130 135 140
 Asp Thr Asp Arg Ser Gly Tyr Ile Glu Ala Asn Glu Leu Lys Gly Phe
 145 150 155 160
 Leu Ser Asp Leu Leu Lys Lys Ala Asn Arg Pro Tyr Asp Glu Pro Lys
 165 170 175
 Leu Gln Glu Tyr Thr Gln Thr Ile Leu Arg Met Phe Asp Leu Asn Gly

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<210> 3095
<211> 328
<212> PRT
<213> Homo sapiens
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4773

305
Ser Trp Pro Ala Gln Ser Trp Gly
325 328

315

320

<210> 3096
<211> 873
<212> PRT
<213> Homo sapiens

<400> 3096
Phe Val Pro Gly Leu Arg Glu Pro Gln Trp Glu Pro Ala Gln Pro Ser
1 5 10 15
Ala Thr Met Ser Ala Pro Ser Glu Glu Glu Glu Tyr Ala Arg Leu Val
20 25 30
Met Glu Ala Gln Pro Glu Trp Leu Arg Ala Glu Val Lys Arg Leu Ser
35 40 45
His Glu Leu Ala Glu Thr Thr Arg Glu Lys Ile Gln Ala Ala Glu Tyr
50 55 60
Gly Leu Ala Val Leu Glu Glu Lys His Gln Leu Lys Leu Gln Phe Glu
65 70 75 80
Glu Leu Glu Val Asp Tyr Glu Ala Ile Arg Ser Glu Met Glu Gln Leu
85 90 95
Lys Glu Ala Phe Gly Gln Ala His Thr Asn His Lys Lys Val Ala Ala
100 105 110
Asp Gly Glu Ser Arg Glu Glu Ser Leu Ile Gln Glu Ser Ala Ser Lys
115 120 125
Glu Gln Tyr Tyr Val Arg Lys Val Leu Glu Leu Gln Thr Glu Leu Lys
130 135 140
Gln Leu Arg Asn Val Leu Thr Asn Thr Gln Ser Glu Asn Glu Arg Leu
145 150 155 160
Ala Ser Val Ala Gln Glu Leu Lys Glu Ile Asn Gln Asn Val Glu Ile
165 170 175
Gln Arg Gly Arg Leu Arg Asp Asp Ile Lys Glu Tyr Lys Phe Arg Glu
180 185 190
Ala Arg Leu Leu Gln Asp Tyr Ser Glu Leu Glu Glu Glu Asn Ile Ser
195 200 205
Leu Gln Lys Gln Val Ser Val Leu Arg Gln Asn Gln Val Glu Phe Glu
210 215 220
Gly Leu Lys His Glu Ile Lys Arg Leu Glu Glu Glu Thr Glu Tyr Leu
225 230 235 240
Asn Ser Gln Leu Glu Asp Ala Ile Arg Leu Lys Glu Ile Ser Glu Arg
245 250 255
Gln Leu Glu Glu Ala Leu Glu Thr Leu Lys Thr Glu Arg Glu Gln Lys
260 265 270
Asn Ser Leu Arg Lys Glu Leu Ser His Tyr Met Ser Ile Asn Asp Ser
275 280 285
Phe Tyr Thr Ser His Leu His Val Ser Leu Asp Gly Leu Lys Phe Ser
290 295 300
Asp Asp Ala Ala Glu Pro Asn Asn Asp Ala Glu Ala Leu Val Asn Gly
305 310 315 320
Phe Glu His Gly Gly Leu Ala Lys Leu Pro Leu Asp Asn Lys Thr Ser
325 330 335
Thr Pro Lys Lys Glu Gly Leu Ala Pro Pro Ser Pro Ser Leu Val Ser
340 345 350
Asp Leu Leu Ser Glu Leu Asn Ile Ser Glu Ile Gln Lys Leu Lys Gln
355 360 365
Gln Leu Met Gln Met Glu Arg Glu Lys Ala Gly Leu Leu Ala Thr Leu
370 375 380
Gln Asp Thr Gln Lys Gln Leu Glu His Thr Arg Gly Ser Leu Ser Glu
385 390 395 400
Gln Gln Glu Lys Val Thr Arg Leu Thr Glu Asn Leu Ser Ala Leu Arg

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<210> 3097
<211> 293
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<212> PRT

<213> Homo sapiens

<400> 3097

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Met Val Lys Val Val Pro Ala Thr Arg Gly Asn Leu Pro Arg Ser Gln
 1          5          10          15
Leu Thr Gly Thr His Gln His Cys Gln Pro Arg Glu Pro Lys Ile Thr
          20          25          30
Ala Ser Glu Arg Leu Arg Arg Arg Pro Arg Ala Thr Ala Arg Leu Arg
          35          40          45
Ala His Ala Ala Pro Pro Glu Pro Pro Leu Ala Val Phe Ala Pro Pro
          50          55          60
Ser Asp Arg Lys Glu Leu Ala Leu Pro Val Ala Cys Asp Pro Val
          65          70          75          80
Ile Ala Ser Val Met Ser Trp Val Gln Ala Ala Ser Leu Ile Gln Gly
          85          90          95
Pro Gly Asp Lys Gly Asp Val Phe Asp Glu Glu Ala Asp Glu Ser Leu
          100          105          110
Leu Ala Gln Arg Glu Trp Gln Ser Asn Met Gln Arg Arg Val Lys Glu
          115          120          125
Gly Tyr Arg Asp Gly Ile Asp Ala Gly Lys Ala Val Thr Leu Gln Gln
          130          135          140
Gly Phe Asn Gln Gly Tyr Lys Lys Gly Ala Glu Val Ile Leu Asn Tyr
          145          150          155          160
Gly Arg Leu Arg Gly Thr Leu Ser Ala Leu Leu Ser Trp Cys His Leu
          165          170          175
His Asn Asn Asn Ser Thr Leu Ile Asn Lys Ile Asn Asn Leu Leu Asp
          180          185          190
Ala Val Gly Gln Cys Glu Glu Tyr Val Leu Lys His Leu Lys Ser Ile
          195          200          205
Thr Pro Pro Ser His Val Val Asp Leu Leu Asp Ser Ile Glu Asp Met
          210          215          220
Asp Leu Cys His Val Val Pro Ala Glu Lys Lys Ile Asp Glu Ala Lys
          225          230          235          240
Asp Glu Arg Leu Cys Glu Asn Asn Ala Glu Phe Asn Lys Asn Cys Ser
          245          250          255
Lys Ser His Ser Gly Ile Asp Cys Ser Tyr Val Glu Cys Cys Arg Thr
          260          265          270
Gln Glu His Ala His Ser Gly Lys Pro Lys Pro His Met Asp Phe Gly
          275          280          285
Thr Asp Ser Gln Phe
          290          293

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<210> 3098

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3098

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Gly Ala Ala Thr Leu Leu Arg Ser Ala Ser Ser Ala Ala Arg Lys Ala
 1          5          10          15
Ala Glu Ala Glu Gln Val Trp Leu His Leu His Arg Tyr Leu Ser Ala
          20          25          30
Asp Arg Arg Val Leu Gly Leu Arg Glu Trp Gly Arg Pro Ala Ser Glu
          35          40          45
Arg Glu Cys Ser Leu Cys Gln Arg Leu Lys Arg Glu Leu Asn Met Gly
          50          55          60
Asp Val Glu Lys Gly Lys Lys Ile Phe Ile Met Lys Cys Ser Gln Cys
          65          70          75          80
His Thr Val Glu Lys Gly Gly Lys His Lys Thr Gly Pro Asn Leu His

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				85					90					95			
Gly	Leu	Phe	Gly	Arg	Lys	Thr	Gly	Gln	Ala	Pro	Gly	Tyr	Ser	Tyr	Thr		
			100					105					110				
Ala	Ala	Asn	Lys	Asn	Lys	Gly	Ile	Ile	Trp	Gly	Glu	Asp	Thr	Leu	Met		
		115				120						125					
Glu	Tyr	Leu	Glu	Asn	Pro	Lys	Lys	Tyr	Ile	Pro	Gly	Thr	Lys	Met	Ile		
		130				135						140					
Phe	Val	Gly	Ile	Lys	Lys	Lys	Glu	Glu	Arg	Ala	Asp	Leu	Ile	Ala	Tyr		
145					150					155					160		
Leu	Lys	Lys	Ala	Thr	Asn	Glu											
				165		167											

<210> 3099
 <211> 414
 <212> PRT
 <213> Homo sapiens

<400> 3099

Trp	Ala	Val	Gly	Gln	Ala	Arg	Ser	Phe	Pro	Ser	His	Pro	Arg	Met	Ser		
1				5				10						15			
Ser	Trp	Ile	Trp	Ser	Arg	Arg	Trp	Ser	Pro	Ser	Val	Ala	Leu	Arg	Val		
		20					25						30				
Thr	Cys	Thr	Ser	Thr	Ser	Ser	Gln	Arg	Trp	Thr	Val	Leu	Ala	Leu	Ser		
		35				40						45					
Lys	Pro	Gly	Ser	Gln	Gln	Gln	Val	Ser	Met	His	Thr	Pro	Ala	Pro	Gly		
	50					55				60							
Pro	Pro	Thr	Ala	Gly	His	Thr	Glu	Pro	Pro	Ser	Glu	Pro	Pro	Arg	Arg		
65				70					75					80			
Ala	Arg	Val	Ala	Lys	Tyr	Arg	Ala	Lys	Phe	Asp	Pro	Arg	Val	Thr	Ala		
			85					90						95			
Lys	Tyr	Asp	Ile	Lys	Ala	Leu	Ile	Gly	Arg	Gly	Ser	Phe	Ser	Arg	Val		
		100					105						110				
Val	Arg	Val	Glu	His	Arg	Ala	Thr	Arg	Gln	Pro	Tyr	Ala	Ile	Lys	Met		
		115				120						125					
Ile	Glu	Thr	Lys	Tyr	Arg	Glu	Gly	Arg	Glu	Val	Cys	Glu	Ser	Glu	Leu		
	130					135					140						
Arg	Val	Leu	Arg	Arg	Val	Arg	His	Ala	Asn	Ile	Ile	Gln	Leu	Val	Glu		
145					150				155					160			
Val	Phe	Glu	Thr	Gln	Glu	Arg	Val	Tyr	Met	Val	Met	Glu	Leu	Ala	Thr		
				165				170					175				
Gly	Gly	Glu	Leu	Phe	Asp	Arg	Ile	Ile	Ala	Lys	Gly	Ser	Phe	Thr	Glu		
		180					185						190				
Arg	Asp	Ala	Thr	Arg	Val	Leu	Gln	Met	Val	Leu	Asp	Gly	Val	Arg	Tyr		
		195				200						205					
Leu	His	Ala	Leu	Gly	Ile	Thr	His	Arg	Asp	Leu	Lys	Pro	Glu	Asn	Leu		
	210					215						220					
Leu	Tyr	Tyr	His	Pro	Gly	Thr	Asp	Ser	Lys	Ile	Ile	Ile	Thr	Asp	Phe		
225					230					235					240		
Gly	Leu	Ala	Ser	Ala	Arg	Lys	Lys	Gly	Asp	Asp	Cys	Leu	Met	Lys	Thr		
			245					250						255			
Thr	Cys	Gly	Thr	Pro	Glu	Tyr	Ile	Ala	Pro	Glu	Val	Leu	Val	Arg	Lys		
		260					265						270				
Pro	Tyr	Thr	Asn	Ser	Val	Asp	Met	Trp	Ala	Leu	Gly	Val	Ile	Ala	Tyr		
		275					280						285				
Ile	Leu	Leu	Ser	Gly	Thr	Met	Pro	Phe	Glu	Asp	Asp	Asn	Arg	Thr	Arg		
	290					295					300						
Leu	Tyr	Arg	Gln	Ile	Leu	Arg	Gly	Lys	Tyr	Ser	Tyr	Ser	Gly	Glu	Pro		
305					310					315				320			
Trp	Pro	Ser	Val	Ser	Asn	Leu	Ala	Lys	Asp	Phe	Ile	Asp	Arg	Leu	Leu		
			325					330						335			
Thr	Val	Asp	Pro	Gly	Ala	Arg	Met	Thr	Ala	Leu	Gln	Ala	Leu	Arg	His		


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<210> 3100
<211> 498
<212> PRT
<213> Homo sapiens
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4778

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      355              360              365
Arg Val Ser Thr Gly Asn Tyr Glu Tyr Arg Leu Ile Leu Arg Cys Arg
      370              375              380
Gln Glu Ala Arg Ala Arg Phe Ser Gln Met Arg Lys Asp Val Leu Glu
385              390              395              400
Lys Met Glu Leu Leu Asp Gln Lys His Val Gln Asp Ile Val Phe Gln
      405              410              415
Leu Gln Arg Leu Val Ser Thr Met Ser Lys Tyr Tyr Asn Asp Cys Tyr
      420              425              430
Ala Val Leu Arg Asp Ala Asp Val Phe Pro Ile Glu Val Asp Leu Ala
      435              440              445
His Thr Thr Leu Ala Tyr Gly Leu Asn Gln Glu Glu Phe Thr Asp Gly
      450              455              460
Glu Glu Glu Glu Glu Glu Asp Thr Ala Ala Gly Glu Pro Ser Arg
465              470              475              480
Asp Thr Arg Gly Ala Ala Gly Pro Leu Asp Lys Gly Gly Ser Trp Cys
      485              490              495
Asp Ser
498

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<210> 3101
<211> 325
<212> PRT
<213> Homo sapiens

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      <400> 3101
Gln Gly Met Asp Ser Lys Gln Gln Cys Val Lys Leu Asn Asp Gly His
  1              5              10              15
Phe Met Pro Val Leu Gly Phe Gly Thr Tyr Ala Pro Pro Glu Val Pro
      20              25              30
Arg Ser Lys Ala Leu Glu Val Thr Lys Leu Ala Ile Glu Ala Gly Phe
      35              40              45
Arg His Ile Asp Ser Ala His Leu Tyr Asn Asn Glu Glu Gln Val Gly
      50              55              60
Leu Ala Ile Arg Ser Lys Ile Ala Asp Gly Ser Val Lys Arg Glu Asp
      65              70              75              80
Ile Phe Tyr Thr Ser Lys Leu Trp Ser Thr Phe His Arg Pro Glu Leu
      85              90              95
Val Arg Pro Ala Leu Glu Asn Ser Leu Lys Lys Ala Gln Leu Asp Tyr
      100              105              110
Val Asp Leu Tyr Leu Ile His Ser Pro Met Ser Leu Lys Pro Gly Glu
      115              120              125
Glu Leu Ser Pro Thr Asp Glu Asn Gly Lys Val Ile Phe Asp Ile Val
      130              135              140
Asp Leu Cys Thr Thr Trp Glu Ala Met Glu Lys Cys Lys Asp Ala Gly
145              150              155              160
Leu Ala Lys Ser Ile Gly Val Ser Asn Phe Asn Arg Arg Gln Leu Glu
      165              170              175
Met Ile Leu Asn Lys Pro Gly Leu Lys Tyr Lys Pro Val Cys Asn Gln
      180              185              190
Val Glu Cys His Pro Tyr Phe Asn Arg Ser Lys Leu Leu Asp Phe Cys
      195              200              205
Lys Ser Lys Asp Ile Val Leu Val Ala Tyr Ser Ala Leu Gly Ser Gln
      210              215              220
Arg Asp Lys Arg Trp Val Asp Pro Asn Ser Pro Val Leu Leu Glu Asp
225              230              235              240
Pro Val Leu Cys Ala Leu Ala Lys Lys His Lys Arg Thr Pro Ala Leu
      245              250              255
Ile Ala Leu Arg Tyr Gln Leu Gln Arg Gly Val Val Val Leu Ala Lys
      260              265              270
Ser Tyr Asn Glu Gln Arg Ile Arg Gln Asn Val Gln Val Phe Glu Phe

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275 280 285
 Gln Leu Thr Ala Glu Asp Met Lys Ala Ile Asp Gly Leu Asp Arg Asn
 290 295 300
 Leu His Tyr Phe Asn Ser Asp Ser Phe Ala Ser His Pro Asn Tyr Pro
 305 310 315 320
 Tyr Ser Asp Glu Tyr
 325

<210> 3102
 <211> 317
 <212> PRT
 <213> Homo sapiens

<400> 3102
 Glu Gln Pro Arg Pro Pro Pro Cys Gly Arg Arg Pro Leu Pro Leu Gly
 1 5 10 15
 Ser Ala Pro Cys Arg Val Arg Leu Gly Arg Ala Pro Arg Gln Ala Pro
 20 25 30
 Ala Met Ser Met Leu Pro Ser Phe Gly Phe Thr Gln Glu Gln Val Ala
 35 40 45
 Cys Val Cys Glu Val Leu Gln Gln Gly Gly Asn Leu Glu Arg Leu Gly
 50 55 60
 Arg Phe Leu Trp Ser Leu Pro Ala Cys Asp His Leu His Lys Asn Glu
 65 70 75 80
 Ser Val Leu Lys Ala Lys Ala Val Val Ala Phe His Arg Gly Asn Phe
 85 90 95
 Arg Glu Leu Tyr Lys Ile Leu Glu Ser His Gln Phe Ser Pro His Asn
 100 105 110
 His Pro Lys Leu Gln Gln Leu Trp Leu Lys Ala His Tyr Val Glu Ala
 115 120 125
 Glu Lys Leu Arg Gly Arg Pro Leu Gly Ala Val Gly Lys Tyr Arg Val
 130 135 140
 Arg Gln Lys Phe Pro Leu Pro Arg Thr Ile Trp Asp Gly Glu Glu Thr
 145 150 155 160
 Ser Tyr Cys Phe Lys Glu Lys Ser Arg Gly Val Leu Arg Glu Trp Tyr
 165 170 175
 Ala His Asn Pro Tyr Pro Ser Pro Arg Glu Lys Arg Glu Leu Ala Glu
 180 185 190
 Ala Thr Gly Leu Thr Thr Thr Gln Val Ser Asn Trp Phe Lys Asn Arg
 195 200 205
 Arg Gln Arg Asp Arg Ala Ala Glu Ala Lys Glu Arg Glu Asn Thr Glu
 210 215 220
 Asn Asn Asn Ser Ser Ser Asn Lys Gln Asn Gln Leu Ser Pro Leu Glu
 225 230 235 240
 Gly Gly Lys Pro Leu Met Ser Ser Ser Glu Glu Phe Ser Pro Pro
 245 250 255
 Gln Ser Pro Asp Gln Asn Ser Val Leu Leu Leu Gln Gly Asn Met Gly
 260 265 270
 His Ala Arg Ser Ser Asn Tyr Ser Leu Pro Gly Leu Thr Ala Ser Gln
 275 280 285
 Pro Ser His Gly Leu Gln Thr His Gln His Gln Leu Gln Asp Ser Leu
 290 295 300
 Leu Gly Pro Leu Thr Ser Ser Leu Val Asp Leu Gly Ser
 305 310 315 317

<210> 3103
 <211> 490
 <212> PRT
 <213> Homo sapiens

<400> 3103

Leu	Val	Tyr	Ser	Trp	Gly	Cys	His	Ile	Met	Ala	Asp	Asn	Asp	Thr	Asp
1				5					10					15	
Arg	Asn	Gln	Thr	Glu	Lys	Leu	Leu	Lys	Arg	Val	Arg	Glu	Leu	Glu	Gln
			20					25					30		
Glu	Val	Gln	Arg	Leu	Lys	Lys	Glu	Gln	Ala	Lys	Asn	Lys	Glu	Asp	Ser
		35					40					45			
Asn	Ile	Arg	Glu	Asn	Ser	Ser	Gly	Ala	Gly	Lys	Thr	Lys	Arg	Ala	Phe
	50					55					60				
Asp	Phe	Ser	Ala	His	Gly	Arg	Arg	His	Val	Ala	Leu	Arg	Ile	Ala	Tyr
	65				70				75					80	
Met	Gly	Trp	Gly	Tyr	Gln	Gly	Phe	Ala	Ser	Gln	Glu	Asn	Thr	Asn	Asn
			85					90						95	
Thr	Ile	Glu	Glu	Lys	Leu	Phe	Glu	Ala	Leu	Thr	Lys	Thr	Arg	Leu	Val
		100						105					110		
Glu	Ser	Arg	Gln	Thr	Ser	Asn	Tyr	His	Arg	Cys	Gly	Arg	Thr	Asp	Lys
		115					120					125			
Gly	Val	Ser	Ala	Phe	Gly	Gln	Val	Ile	Ser	Leu	Asp	Leu	Arg	Ser	Gln
	130				135						140				
Phe	Pro	Arg	Gly	Arg	Asp	Ser	Glu	Asp	Phe	Asn	Val	Lys	Glu	Glu	Ala
	145				150					155				160	
Asn	Ala	Ala	Ala	Glu	Glu	Ile	Arg	Tyr	Thr	His	Ile	Leu	Asn	Arg	Val
			165					170					175		
Leu	Pro	Pro	Asp	Ile	Arg	Ile	Leu	Ala	Trp	Ala	Pro	Val	Glu	Pro	Ser
		180						185					190		
Phe	Ser	Ala	Arg	Phe	Ser	Cys	Leu	Glu	Arg	Thr	Tyr	Arg	Tyr	Phe	Phe
	195					200						205			
Pro	Arg	Ala	Asp	Leu	Asp	Ile	Val	Thr	Met	Asp	Tyr	Ala	Ala	Gln	Lys
	210					215					220				
Tyr	Val	Gly	Thr	His	Asp	Phe	Arg	Asn	Leu	Cys	Lys	Met	Asp	Val	Ala
	225				230					235				240	
Asn	Gly	Val	Ile	Asn	Phe	Gln	Arg	Thr	Ile	Leu	Ser	Ala	Gln	Val	Gln
			245						250					255	
Leu	Val	Gly	Gln	Ser	Pro	Gly	Glu	Gly	Arg	Trp	Gln	Glu	Pro	Phe	Gln
		260					265						270		
Leu	Cys	Gln	Phe	Glu	Val	Thr	Gly	Gln	Ala	Phe	Leu	Tyr	His	Gln	Val
	275						280					285			
Arg	Cys	Met	Met	Ala	Ile	Leu	Phe	Leu	Ile	Gly	Gln	Gly	Met	Glu	Lys
	290					295					300				
Pro	Glu	Ile	Ile	Asp	Glu	Leu	Leu	Asn	Ile	Glu	Lys	Asn	Pro	Gln	Lys
	305				310					315				320	
Pro	Gln	Tyr	Ser	Met	Ala	Val	Glu	Phe	Pro	Leu	Val	Leu	Tyr	Asp	Cys
			325					330					335		
Lys	Phe	Glu	Asn	Val	Lys	Trp	Ile	Tyr	Asp	Gln	Glu	Ala	Gln	Glu	Phe
		340						345					350		
Asn	Ile	Thr	His	Leu	Gln	Gln	Leu	Trp	Ala	Asn	His	Ala	Val	Lys	Thr
	355						360					365			
His	Met	Leu	Tyr	Ser	Met	Leu	Gln	Gly	Leu	Asp	Thr	Val	Pro	Val	Pro
	370					375					380				
Cys	Gly	Ile	Gly	Pro	Lys	Met	Asp	Gly	Met	Thr	Glu	Trp	Gly	Asn	Val
	385				390					395				400	
Lys	Pro	Ser	Val	Ile	Lys	Gln	Thr	Ser	Ala	Phe	Val	Glu	Gly	Val	Lys
			405						410					415	
Met	Arg	Thr	Tyr	Lys	Pro	Leu	Met	Asp	Arg	Pro	Lys	Cys	Gln	Gly	Leu
		420						425					430		
Glu	Ser	Arg	Ile	Gln	His	Phe	Val	Arg	Arg	Gly	Arg	Ile	Glu	His	Pro
	435					440						445			
His	Leu	Phe	His	Glu	Glu	Glu	Thr	Lys	Ala	Lys	Arg	Asp	Cys	Asn	Asp
	450					455					460				
Thr	Leu	Glu	Glu	Asp	Asn	Thr	Asn	Leu	Glu	Thr	Pro	Thr	Lys	Arg	Val
	465				470					475				480	
Cys	Val	Asp	Thr	Glu	Ile	Lys	Ser	Ile	Ile						

485

490

<210> 3104
 <211> 430
 <212> PRT
 <213> Homo sapiens

<400> 3104

Val	Thr	Leu	Ile	Lys	Met	Asn	Ala	Met	Leu	Glu	Thr	Pro	Glu	Leu	Pro
1				5					10					15	
Ala	Val	Phe	Asp	Gly	Val	Lys	Leu	Ala	Ala	Val	Ala	Ala	Val	Leu	Tyr
			20					25					30		
Val	Ile	Val	Arg	Cys	Leu	Asn	Leu	Lys	Ser	Pro	Thr	Ala	Pro	Pro	Asp
		35					40					45			
Leu	Tyr	Phe	Gln	Asp	Ser	Gly	Leu	Ser	Arg	Phe	Leu	Leu	Lys	Ser	Cys
	50					55					60				
Pro	Leu	Leu	Thr	Lys	Glu	Tyr	Ile	Pro	Pro	Leu	Ile	Trp	Gly	Lys	Ser
65					70					75				80	
Gly	His	Ile	Gln	Thr	Ala	Leu	Tyr	Gly	Lys	Met	Gly	Arg	Val	Arg	Ser
			85						90					95	
Pro	His	Pro	Tyr	Gly	His	Arg	Lys	Phe	Ile	Thr	Met	Ser	Asp	Gly	Ala
			100					105					110		
Thr	Ser	Thr	Phe	Asp	Leu	Phe	Glu	Pro	Leu	Ala	Glu	His	Cys	Val	Gly
		115					120					125			
Asp	Asp	Ile	Thr	Met	Val	Ile	Cys	Pro	Gly	Ile	Ala	Asn	His	Ser	Glu
	130					135						140			
Lys	Gln	Tyr	Ile	Arg	Thr	Phe	Val	Asp	Tyr	Ala	Gln	Lys	Asn	Gly	Tyr
145					150					155					160
Arg	Cys	Ala	Val	Leu	Asn	His	Leu	Gly	Ala	Leu	Pro	Asn	Ile	Glu	Leu
				165					170					175	
Thr	Ser	Pro	Arg	Met	Phe	Thr	Tyr	Gly	Cys	Thr	Trp	Glu	Phe	Gly	Ala
			180					185					190		
Met	Val	Asn	Tyr	Ile	Lys	Lys	Thr	Tyr	Pro	Leu	Thr	Gln	Leu	Val	Val
		195					200					205			
Val	Gly	Phe	Ser	Leu	Gly	Gly	Asn	Ile	Val	Cys	Lys	Tyr	Leu	Gly	Glu
	210					215						220			
Thr	Gln	Ala	Asn	Gln	Glu	Lys	Val	Leu	Cys	Cys	Val	Ser	Val	Cys	Gln
225					230					235					240
Gly	Tyr	Ser	Ala	Leu	Arg	Ala	Gln	Glu	Thr	Phe	Met	Gln	Trp	Asp	Gln
				245					250					255	
Cys	Arg	Arg	Phe	Tyr	Asn	Phe	Leu	Met	Ala	Asp	Asn	Met	Lys	Lys	Ile
			260					265					270		
Ile	Leu	Ser	His	Arg	Gln	Ala	Leu	Phe	Gly	Asp	His	Val	Lys	Lys	Pro
		275					280					285			
Gln	Ser	Leu	Glu	Asp	Thr	Asp	Leu	Ser	Arg	Leu	Tyr	Thr	Ala	Thr	Ser
	290					295						300			
Leu	Met	Gln	Ile	Asp	Asp	Asn	Val	Met	Arg	Lys	Phe	His	Gly	Tyr	Asn
305					310					315					320
Ser	Leu	Lys	Glu	Tyr	Tyr	Glu	Glu	Glu	Ser	Cys	Met	Arg	Tyr	Leu	His
				325					330					335	
Arg	Ile	Tyr	Val	Pro	Leu	Met	Leu	Val	Asn	Ala	Ala	Asp	Asp	Pro	Leu
			340					345					350		
Val	His	Glu	Ser	Leu	Leu	Thr	Ile	Pro	Lys	Ser	Leu	Ser	Glu	Lys	Arg
		355					360					365			
Glu	Asn	Val	Met	Phe	Val	Leu	Pro	Leu	His	Gly	Gly	His	Leu	Gly	Phe
	370					375						380			
Phe	Glu	Gly	Ser	Val	Leu	Phe	Pro	Glu	Pro	Leu	Thr	Trp	Met	Asp	Lys
385					390					395					400
Leu	Val	Val	Glu	Tyr	Ala	Asn	Ala	Ile	Cys	Gln	Trp	Glu	Arg	Asn	Lys
				405					410					415	
Leu	Gln	Cys	Ser	Asp	Thr	Glu	Gln	Val	Glu	Ala	Asp	Leu	Glu		

420

425

430

<210> 3105
 <211> 417
 <212> PRT
 <213> Homo sapiens

<400> 3105
 Met Gly Leu Leu Leu Met Ile Leu Ala Ser Ala Val Leu Gly Ser Phe
 1 5 10 15
 Leu Thr Leu Leu Ala Gln Phe Phe Leu Leu Tyr Arg Arg Gln Pro Glu
 20 25 30
 Pro Pro Ala Asp Glu Ala Ala Arg Ala Gly Glu Gly Phe Arg Tyr Ile
 35 40 45
 Lys Pro Val Pro Gly Leu Leu Leu Arg Glu Tyr Leu Tyr Gly Gly Gly
 50 55 60
 Arg Asp Glu Glu Pro Ser Gly Ala Ala Pro Glu Gly Gly Ala Thr Pro
 65 70 75 80
 Thr Ala Ala Pro Glu Thr Pro Ala Pro Pro Thr Arg Glu Thr Cys Tyr
 85 90 95
 Phe Leu Asn Ala Thr Ile Leu Phe Leu Phe Arg Glu Leu Arg Asp Thr
 100 105 110
 Ala Leu Thr Arg Arg Trp Val Thr Lys Lys Ile Lys Val Glu Phe Glu
 115 120 125
 Glu Leu Leu Gln Thr Lys Thr Ala Gly Arg Leu Leu Glu Gly Leu Ser
 130 135 140
 Leu Arg Asp Val Phe Leu Gly Glu Thr Val Pro Phe Ile Lys Thr Ile
 145 150 155 160
 Arg Leu Val Arg Pro Val Val Pro Ser Ala Thr Gly Glu Pro Asp Gly
 165 170 175
 Pro Glu Gly Glu Ala Leu Pro Ala Ala Cys Pro Glu Glu Leu Ala Phe
 180 185 190
 Glu Ala Glu Val Glu Tyr Asn Gly Gly Phe His Leu Ala Ile Asp Val
 195 200 205
 Asp Leu Val Phe Gly Lys Ser Ala Tyr Leu Phe Val Lys Leu Ser Arg
 210 215 220
 Val Val Gly Arg Leu Arg Leu Val Phe Thr Arg Val Pro Phe Thr His
 225 230 235 240
 Trp Phe Phe Ser Phe Val Glu Asp Pro Leu Ile Asp Phe Glu Val Arg
 245 250 255
 Ser Gln Phe Glu Gly Arg Pro Met Pro Gln Leu Thr Ser Ile Ile Val
 260 265 270
 Asn Gln Leu Lys Lys Ile Ile Lys Arg Lys His Thr Leu Pro Asn Tyr
 275 280 285
 Lys Ile Arg Phe Lys Pro Phe Phe Pro Tyr Gln Thr Leu Gln Gly Phe
 290 295 300
 Glu Glu Asp Glu Glu His Ile His Ile Gln Gln Trp Ala Leu Thr Glu
 305 310 315 320
 Gly Arg Leu Lys Val Thr Leu Leu Glu Cys Ser Arg Leu Leu Ile Phe
 325 330 335
 Gly Ser Tyr Asp Arg Glu Ala Asn Val His Cys Thr Leu Glu Leu Ser
 340 345 350
 Ser Ser Val Trp Glu Glu Lys Gln Arg Ser Ser Ile Lys Thr Gly Thr
 355 360 365
 Ile Ser Leu Thr Ala Val Phe Met Gly Trp His Arg Val Ser Glu Ala
 370 375 380
 Phe Pro Gly Leu Trp Tyr Lys Leu Leu Val Asp Leu Pro Phe Trp Gly
 385 390 395 400
 Leu Glu Asp Gly Gly Pro Leu Leu Thr Val Pro Leu Arg Gln Cys Pro
 405 410 415
 Gly

417

<210> 3106
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 3106
 Met Ala Ala Ala Gly Ala Gly Arg Leu Arg Arg Val Ala Ser Ala Leu
 1 5 10 15
 Leu Leu Arg Ser Pro Arg Leu Pro Ala Arg Glu Leu Ser Ala Pro Ala
 20 25 30
 Arg Leu Tyr His Lys Lys Val Val Asp His Tyr Glu Asn Pro Arg Asn
 35 40 45
 Val Gly Ser Leu Asp Lys Thr Ser Lys Asn Val Gly Thr Gly Leu Val
 50 55 60
 Gly Ala Pro Ala Cys Gly Asp Val Met Lys Leu Gln Ile Gln Val Asp
 65 70 75 80
 Glu Lys Gly Lys Ile Val Asp Ala Arg Phe Lys Thr Phe Gly Cys Gly
 85 90 95
 Ser Ala Ile Ala Ser Ser Ser Leu Ala Thr Glu Trp Val Lys Gly Lys
 100 105 110
 Thr Val Glu Glu Ala Leu Thr Ile Lys Asn Thr Asp Ile Ala Lys Glu
 115 120 125
 Leu Cys Leu Pro Pro Val Lys Leu His Cys Ser Met Leu Ala Glu Asp
 130 135 140
 Ala Ile Lys Ala Ala Leu Ala Asp Tyr Lys Leu Lys Gln Glu Pro Lys
 145 150 155 160
 Lys Gly Glu Ala Glu Lys Lys
 165 167

<210> 3107
 <211> 372
 <212> PRT
 <213> Homo sapiens

<400> 3107
 Thr Cys Gln Asp Val Arg Ser Val Phe Ser Leu Val Arg Ala Asn Ile
 1 5 10 15
 Phe Gly Glu Glu Ser Thr Ala Gly Ala Gly Trp His Arg Glu Glu Asp
 20 25 30
 Met Arg Lys Glu Leu Gln Leu Ser Leu Ser Val Thr Leu Leu Val
 35 40 45
 Cys Gly Phe Leu Tyr Gln Phe Thr Leu Lys Ser Ser Cys Leu Phe Cys
 50 55 60
 Leu Pro Ser Phe Lys Ser His Gln Gly Leu Glu Ala Leu Leu Ser His
 65 70 75 80
 Arg Arg Gly Ile Val Phe Leu Glu Thr Ser Glu Arg Met Glu Pro Pro
 85 90 95
 His Leu Val Ser Cys Ser Val Glu Ser Ala Ala Lys Ile Tyr Pro Glu
 100 105 110
 Trp Pro Val Val Phe Phe Met Lys Gly Leu Thr Asp Ser Thr Pro Met
 115 120 125
 Pro Ser Asn Ser Thr Tyr Pro Ala Phe Ser Phe Leu Ser Ala Ile Asp
 130 135 140
 Asn Val Phe Leu Phe Pro Leu Asp Met Lys Arg Leu Leu Glu Asp Thr
 145 150 155 160
 Pro Leu Phe Ser Trp Tyr Asn Gln Ile Asn Ala Ser Ala Glu Arg Asn

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<210> 3108
<211> 257
<212> PRT
<213> Homo sapiens
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4785

210	215	220
Cys Ser Ile Glu Trp Phe His Phe Ala Cys Val Gly Leu Thr Thr Lys		
225	230	235
Pro Arg Gly Lys Trp Phe Cys Pro Arg Cys Ser Gln Glu Arg Lys Lys		240
	245	250
		255
Lys		
257		

<210> 3109
 <211> 871
 <212> PRT
 <213> Homo sapiens

<400> 3109

Met Val Ala Val Arg Ala Ala Gly Pro Arg Glu Gly Ala Ser Gln Asp	
1 5 10 15	
Glu Ala Gly Thr Val Trp Ala Pro Met Thr Gly Cys Pro Cys Gln Cys	
20 25 30	
Arg Pro Gly Pro Ser Trp Leu Leu Val Asp Thr Leu Glu Pro Glu Thr	
35 40 45	
Ala Tyr Pro Val Gln Arg Pro Gly Pro Glu Gln Ala Gly Asn Gln Arg	
50 55 60	
Leu Gln Met Lys Arg Ala Gln Phe Gly Pro His Asp Trp Leu Ser Leu	
65 70 75 80	
Pro Val Pro Pro Gly Pro Ser Trp Leu Leu Val Asp Thr Leu Glu Pro	
85 90 95	
Glu Thr Ala Tyr Gln Phe Ser Val Leu Ala Gln Asn Lys Leu Gly Thr	
100 105 110	
Ser Ala Phe Ser Glu Val Val Thr Val Asn Thr Leu Ala Phe Pro Ile	
115 120 125	
Thr Thr Pro Glu Pro Leu Val Leu Val Thr Pro Pro Arg Cys Leu Ile	
130 135 140	
Ala Asn Arg Thr Gln Gln Gly Val Leu Leu Ser Trp Leu Pro Pro Ala	
145 150 155 160	
Asn His Ser Phe Pro Ile Asp Arg Tyr Ile Met Glu Phe Arg Val Ala	
165 170 175	
Glu Arg Trp Glu Leu Leu Asp Asp Gly Ile Pro Gly Thr Glu Gly Glu	
180 185 190	
Phe Phe Ala Lys Asp Leu Ser Gln Asp Thr Trp Tyr Glu Phe Arg Val	
195 200 205	
Leu Ala Val Met Gln Asp Leu Ile Ser Glu Pro Ser Asn Ile Ala Gly	
210 215 220	
Val Ser Ser Thr Asp Ile Phe Pro Gln Pro Asp Leu Thr Glu Asp Gly	
225 230 235 240	
Leu Ala Arg Pro Val Leu Ala Gly Ile Val Ala Thr Ile Cys Phe Leu	
245 250 255	
Ala Ala Ala Ile Leu Phe Ser Thr Leu Ala Ala Cys Phe Val Asn Lys	
260 265 270	
Gln Arg Lys Arg Lys Leu Lys Arg Lys Lys Asp Pro Pro Leu Ser Ile	
275 280 285	
Thr His Cys Arg Lys Ser Leu Glu Ser Pro Leu Ser Ser Gly Lys Val	
290 295 300	
Ser Pro Glu Ser Ile Arg Thr Leu Arg Ala Pro Ser Glu Ser Ser Asp	
305 310 315 320	
Asp Gln Gly Gln Pro Ala Ala Lys Arg Met Leu Ser Pro Thr Arg Glu	
325 330 335	
Lys Glu Leu Ser Leu Tyr Lys Lys Thr Lys Arg Ala Ile Ser Ser Lys	
340 345 350	
Lys Tyr Ser Val Ala Lys Ala Glu Ala Glu Ala Glu Thr Thr Pro	
355 360 365	
Ile Glu Leu Ile Ser Arg Gly Pro Asp Gly Arg Phe Val Met Asp Pro	

370	375	380
Ala Glu Met Glu Pro Ser Leu Lys Ser Arg Arg Ile Glu Gly Phe Pro		
385	390	395
Phe Ala Glu Glu Thr Asp Met Tyr Pro Glu Phe Arg Gln Ser Asp Glu		400
	405	410
Glu Asn Glu Asp Pro Leu Val Pro Thr Ser Val Ala Ala Leu Lys Ser		415
	420	425
Gln Leu Thr Pro Leu Ser Ser Ser Gln Glu Ser Tyr Leu Pro Pro Pro		430
	435	440
Ala Tyr Ser Pro Arg Phe Gln Pro Arg Gly Leu Glu Gly Pro Gly Gly		445
	450	455
Leu Glu Gly Arg Leu Gln Ala Thr Gly Gln Ala Arg Pro Pro Ala Pro		460
465	470	475
Arg Pro Phe His His Gly Gln Tyr Tyr Gly Tyr Leu Ser Ser Ser Ser		480
	485	490
Pro Gly Glu Val Glu Pro Pro Pro Phe Tyr Val Pro Glu Val Gly Ser		495
	500	505
Pro Leu Ser Ser Val Met Ser Ser Pro Pro Leu Pro Thr Glu Gly Pro		510
	515	520
Phe Gly His Pro Thr Ile Pro Glu Glu Asn Gly Glu Asn Ala Ser Asn		525
530	535	540
Ser Thr Leu Pro Leu Thr Gln Thr Pro Thr Gly Gly Arg Ser Pro Glu		545
545	550	555
Pro Trp Gly Arg Pro Glu Phe Pro Phe Gly Gly Leu Glu Thr Pro Ala		560
	565	570
Met Met Phe Pro His Gln Leu Pro Pro Cys Asp Val Pro Glu Ser Leu		575
	580	585
Gln Pro Lys Ala Gly Leu Pro Arg Gly Leu Pro Pro Thr Ser Leu Gln		590
	595	600
Val Pro Ala Ala Tyr Pro Gly Ile Leu Ser Leu Glu Ala Pro Lys Gly		605
610	615	620
Trp Ala Gly Lys Ser Pro Gly Arg Gly Pro Val Pro Ala Pro Pro Ala		625
625	630	635
Ala Lys Trp Gln Asp Arg Pro Met Gln Pro Leu Val Ser Gln Gly Gln		640
	645	650
Leu Arg His Thr Ser Gln Gly Met Gly Ile Pro Val Leu Pro Tyr Pro		655
	660	665
Glu Pro Ala Glu Pro Gly Ala His Gly Gly Pro Ser Thr Phe Gly Leu		670
	675	680
Asp Thr Arg Trp Tyr Glu Pro Gln Pro Arg Pro Arg Pro Ser Pro Arg		685
690	695	700
Gln Ala Arg Arg Ala Glu Pro Ser Leu His Gln Val Val Leu Gln Pro		705
705	710	715
Ser Arg Leu Ser Pro Leu Thr Gln Ser Pro Leu Ser Ser Arg Thr Gly		720
	725	730
Ser Pro Glu Leu Ala Ala Arg Ala Arg Pro Arg Pro Gly Leu Leu Gln		735
	740	745
Gln Ala Glu Met Ser Glu Ile Thr Leu Gln Pro Pro Ala Ala Val Ser		750
	755	760
Phe Ser Arg Lys Ser Thr Pro Ser Thr Gly Ser Pro Ser Gln Ser Ser		765
770	775	780
Arg Ser Gly Ser Pro Ser Tyr Arg Pro Ala Met Gly Phe Thr Thr Leu		785
785	790	795
Ala Thr Gly Tyr Pro Ser Pro Pro Pro Gly Pro Ala Pro Ala Gly Pro		800
	805	810
Gly Asp Ser Leu Asp Val Phe Gly Gln Thr Pro Ser Pro Arg Arg Thr		815
	820	825
Gly Glu Glu Leu Leu Arg Pro Glu Thr Pro Pro Pro Thr Leu Pro Thr		830
	835	840
Leu Gly Lys Leu Arg Arg Asp Arg Pro Ala Pro Ala Thr Ser Pro Pro		845
	850	855
Glu Arg Ala Leu Ser Lys Leu		860
865	870	871

<210> 3110
 <211> 279
 <212> PRT
 <213> Homo sapiens

<400> 3110
 Ile Leu Gly Ser Arg Thr Met Ser Leu Thr Asn Thr Lys Thr Gly Phe
 1 5 10 15
 Ser Val Lys Asp Ile Leu Asp Leu Pro Asp Thr Asn Asp Glu Glu Gly
 20 25 30
 Ser Val Ala Glu Gly Pro Glu Glu Asn Glu Gly Pro Glu Pro Ala
 35 40 45
 Lys Arg Ala Gly Pro Leu Gly Gln Gly Ala Leu Asp Ala Val Gln Ser
 50 55 60
 Leu Pro Leu Lys Asn Pro Phe Tyr Asp Ser Ser Asp Asn Pro Tyr Thr
 65 70 75 80
 Arg Trp Leu Ala Ser Thr Glu Gly Leu Gln Tyr Ser Leu His Gly Leu
 85 90 95
 Ala Ala Gly Ala Pro Pro Gln Asp Ser Ser Ser Lys Ser Pro Glu Pro
 100 105 110
 Ser Ala Asp Glu Ser Pro Asp Asn Asp Lys Glu Thr Pro Gly Gly Gly
 115 120 125
 Gly Asp Ala Gly Lys Lys Arg Lys Arg Arg Val Leu Phe Ser Lys Ala
 130 135 140
 Gln Thr Tyr Glu Leu Glu Arg Arg Phe Arg Gln Gln Arg Tyr Leu Ser
 145 150 155 160
 Ala Pro Glu Arg Glu His Leu Ala Ser Leu Ile Arg Leu Thr Pro Thr
 165 170 175
 Gln Val Lys Ile Trp Phe Gln Asn His Arg Tyr Lys Met Lys Arg Ala
 180 185 190
 Arg Ala Glu Lys Gly Met Glu Val Thr Pro Leu Pro Ser Pro Arg Arg
 195 200 205
 Val Ala Val Pro Val Leu Val Arg Asp Gly Lys Pro Cys His Ala Leu
 210 215 220
 Lys Ala Gln Asp Leu Ala Ala Ala Thr Phe Gln Ala Gly Ile Pro Phe
 225 230 235 240
 Ser Ala Tyr Ser Ala Gln Ser Leu Gln His Met Gln Tyr Asn Ala Gln
 245 250 255
 Tyr Ser Ser Ala Ser Thr Pro Gln Tyr Pro Thr Ala His Pro Leu Val
 260 265 270
 Gln Ala Gln Gln Trp Thr Trp
 275 279

<210> 3111
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 3111
 Pro Ser Val Ala Ser Leu Ala Arg Arg Phe Ser Gly Arg Ala Leu Trp
 1 5 10 15
 Pro Pro Ser His Ser Val Pro Gly Asn Arg Ala Leu Cys Pro Arg Leu
 20 25 30
 Leu His Gly Thr Thr Leu Pro Gly Gly Asn Gln Arg Glu Leu Ala Arg
 35 40 45
 Gln Lys Asn Met Lys Lys Gln Ser Asp Ser Val Lys Gly Lys Arg Arg
 50 55 60
 Asp Asp Gly Leu Ser Ala Ala Ala Arg Lys Gln Arg Asp Ser Thr Pro

65					70					75				80
Arg	Asp	Ser	Glu	Ile	Met	Gln	Gln	Lys	Gln	Lys	Lys	Ala	Asn	Glu
				85					90					95
Lys	Glu	Glu	Pro	Lys										
			100	101										

<210> 3112
 <211> 695
 <212> PRT
 <213> Homo sapiens

<400> 3112

Ala	Pro	Met	Leu	Gln	Ile	His	His	Phe	Ser	Phe	Lys	Leu	Ile	Phe	Gln
1				5					10					15	
Asn	Ile	His	Lys	Ser	Lys	Phe	Ile	Ser	Gln	Arg	Leu	Ser	Gln	Asn	Ala
			20					25					30		
Asp	Ser	Thr	Arg	His	Thr	Asn	Leu	Ser	Asn	Thr	His	Tyr	Ser	Asp	Leu
		35					40					45			
Ile	Val	Trp	Asn	Cys	Cys	Leu	Phe	Phe	Arg	Asn	Trp	Cys	Asn	Glu	Phe
	50					55					60				
Phe	Leu	Lys	Ser	Cys	His	Phe	Ala	Gln	Glu	Arg	Glu	Gly	Ser	Gly	Asp
	65				70					75					80
Leu	Cys	Asn	Ser	Arg	Ala	Glu	Lys	Thr	Lys	Ser	Ala	Ala	Cys	Val	Ile
				85					90					95	
Phe	Arg	Arg	Phe	Pro	Val	Ala	Pro	Leu	Ile	Pro	Tyr	Pro	Leu	Ile	Thr
			100					105					110		
Lys	Glu	Asp	Ile	Asn	Ala	Ile	Glu	Met	Glu	Glu	Asp	Lys	Arg	Asp	Leu
		115					120					125			
Ile	Ser	Arg	Glu	Ile	Ser	Lys	Phe	Arg	Asp	Thr	His	Lys	Lys	Leu	Glu
	130					135					140				
Glu	Glu	Lys	Gly	Lys	Lys	Glu	Lys	Glu	Arg	Gln	Glu	Ile	Glu	Lys	Glu
	145				150					155					160
Arg	Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu	Arg	Arg	Glu
				165				170						175	
Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu	Lys	Glu	Lys	Glu
			180					185					190		
Arg	Glu	Arg	Glu	Arg	Glu	Arg	Asp	Arg	Asp	Arg	Asp	Arg	Thr	Lys	Glu
	195						200					205			
Arg	Asp	Arg	Asp	Arg	Asp	Arg	Glu	Arg	Asp	Arg	Asp	Arg	Asp	Arg	Glu
	210					215					220				
Arg	Ser	Ser	Asp	Arg	Asn	Lys	Asp	Arg	Ser	Arg	Ser	Arg	Glu	Lys	Ser
	225				230					235					240
Arg	Asp	Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu
				245					250					255	
Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu
			260					265						270	
Arg	Glu	Arg	Glu	Arg	Glu	Lys	Asp	Lys	Lys	Arg	Asp	Arg	Glu	Glu	Asp
	275					280						285			
Glu	Glu	Asp	Ala	Tyr	Glu	Arg	Arg	Lys	Leu	Glu	Arg	Lys	Leu	Arg	Glu
	290					295					300				
Lys	Glu	Ala	Ala	Tyr	Gln	Glu	Arg	Leu	Lys	Asn	Trp	Glu	Ile	Arg	Glu
	305				310					315					320
Arg	Lys	Lys	Thr	Arg	Glu	Tyr	Glu	Lys	Glu	Ala	Glu	Arg	Glu	Glu	Glu
				325					330					335	
Arg	Arg	Arg	Glu	Met	Ala	Lys	Glu	Ala	Lys	Arg	Leu	Lys	Glu	Phe	Leu
			340					345					350		
Glu	Asp	Tyr	Asp	Asp	Asp	Arg	Asp	Asp	Pro	Lys	Tyr	Tyr	Arg	Gly	Ser
	355						360					365			
Ala	Leu	Gln	Lys	Arg	Leu	Arg	Asp	Arg	Glu	Lys	Glu	Met	Glu	Ala	Asp
	370					375					380				
Glu	Arg	Asp	Arg	Lys	Arg	Glu	Lys	Glu	Glu	Leu	Glu	Glu	Ile	Arg	Gln

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385          390          395          400
Arg Leu Leu Ala Glu Gly His Pro Asp Pro Asp Ala Glu Leu Gln Arg
          405          410          415
Met Glu Gln Glu Ala Glu Arg Arg Arg Gln Pro Gln Ile Lys Gln Glu
          420          425          430
Pro Glu Ser Glu Glu Glu Glu Glu Lys Gln Glu Lys Glu Glu Lys
          435          440          445
Arg Glu Glu Pro Met Glu Glu Glu Glu Pro Glu Gln Lys Pro Cys
          450          455          460
Leu Lys Pro Thr Leu Arg Pro Ile Ser Ser Ala Pro Ser Val Ser Ser
465          470          475          480
Ala Ser Gly Asn Ala Thr Pro Asn Thr Pro Gly Asp Glu Ser Pro Cys
          485          490          495
Gly Ile Ile Ile Pro His Glu Asn Ser Pro Asp Gln Gln Gln Pro Glu
          500          505          510
Glu His Arg Pro Lys Ile Gly Leu Ser Leu Lys Leu Gly Ala Ser Asn
          515          520          525
Ser Pro Gly Gln Pro Asn Ser Val Lys Arg Lys Lys Leu Pro Val Asp
530          535          540
Ser Val Phe Asn Lys Phe Glu Asp Glu Asp Ser Asp Asp Val Pro Arg
545          550          555          560
Lys Arg Lys Leu Val Pro Leu Asp Tyr Gly Glu Asp Asp Lys Asn Ala
          565          570          575
Thr Lys Gly Thr Val Asn Thr Glu Glu Lys Arg Lys His Ile Lys Ser
          580          585          590
Leu Ile Glu Lys Ile Pro Thr Ala Lys Pro Glu Leu Phe Ala Tyr Pro
          595          600          605
Leu Asp Trp Ser Ile Val Asp Ser Ile Leu Met Glu Arg Arg Ile Arg
610          615          620
Pro Trp Ile Asn Lys Lys Ile Ile Glu Tyr Ile Gly Glu Glu Glu Ala
625          630          635          640
Thr Leu Val Asp Leu Val Cys Ser Lys Val Met Ala His Ser Pro Pro
          645          650          655
Gln Ser Ile Leu Asp Asp Val Ala Met Val Leu Asp Glu Glu Ala Glu
          660          665          670
Val Phe Ile Val Lys Met Trp Arg Leu Leu Ile Tyr Glu Thr Glu Ala
          675          680          685
Lys Lys Ile Gly Leu Val Lys
690          695

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<210> 3113

<211> 223

<212> PRT

<213> Homo sapiens

<400> 3113

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Val Cys Ala Gly Ile Arg Asp Pro Cys Ser Thr Pro Leu Ala Lys Pro
  1          5          10          15
Ala Ala Gly Gly Ala Glu Asn Leu Ser Phe Gly Lys Gln Pro Gly Leu
          20          25          30
Glu Thr Asn Ile Leu Lys Met Thr Thr Pro Asn Lys Thr Pro Pro Gly
          35          40          45
Ala Asp Pro Lys Gln Leu Glu Arg Thr Gly Thr Val Arg Glu Ile Gly
          50          55          60
Ser Gln Ala Val Trp Ser Leu Ser Ser Cys Lys Pro Gly Phe Gly Val
          65          70          75          80
Asp Gln Leu Arg Asp Asp Asn Leu Glu Thr Tyr Trp Gln Ser Asp Gly
          85          90          95
Ser Gln Pro His Leu Val Asn Ile Gln Phe Arg Arg Lys Thr Thr Val
          100          105          110
Lys Thr Leu Cys Ile Tyr Ala Asp Tyr Lys Ser Asp Glu Ser Tyr Thr

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115	120	125
Pro Ser Lys Ile Ser Val Arg Val Gly Asn Asn Phe His Asn Leu Gln		
130	135	140
Glu Ile Arg Gln Leu Glu Leu Val Glu Pro Ser Gly Trp Ile His Val		
145	150	155
Pro Leu Thr Asp Asn His Lys Lys Pro Thr Arg Thr Phe Met Ile Gln		
165	170	175
Ile Ala Val Leu Ala Asn His Gln Asn Gly Arg Asp Thr His Met Arg		
180	185	190
Gln Ile Lys Ile Tyr Thr Pro Val Glu Glu Ser Ser Ile Gly Lys Phe		
195	200	205
Pro Arg Cys Thr Thr Ile Asp Phe Met Met Tyr Arg Ser Ile Arg		
210	215	220
		223

<210> 3114
 <211> 537
 <212> PRT
 <213> Homo sapiens

<400> 3114

Met Thr Ser Lys Glu Glu Ser Arg Arg Gln Gln Pro Thr Ala Gly Pro		
1	5	10
Ala Gly Gln Gly Lys Leu Pro Ser Pro Ser Glu Pro Gln Leu Pro Thr		
20	25	30
Pro Pro Thr Arg Ser Leu His His Phe Arg Arg Pro Leu Ser Pro Ser		
35	40	45
Arg Glu Ala Gln Ala His Ile Ala Pro Ser Ser Glu Leu His Leu Pro		
50	55	60
Gln Ser Gln Ser Ala Gly Pro Pro Pro Leu Gly Ala Gly Thr Glu Val		
65	70	75
Glu Leu Val Val Pro Gly Arg Asp Glu Gly Ser Arg Gly Ala Leu Pro		
85	90	95
Gly Ser Ser Gly Val Lys Phe Val Trp Arg Lys Ile Val Arg Phe Pro		
100	105	110
Val Ser Asp Gln Val Arg Thr Leu Ser Ile Ser Arg Leu Met Arg Arg		
115	120	125
Leu Leu Glu Met Met Gln Thr Leu Val Gln Phe Ile Ile Gly Trp Arg		
130	135	140
Ser Leu Leu Gly Arg Thr Leu Gly Thr Ile Met Asn Thr Met Tyr Val		
145	150	155
Met Met Ala Gln Ile Leu Arg Ser His Leu Ile Lys Ala Thr Val Ile		
165	170	175
Pro Asn Arg Val Lys Met Leu Pro Tyr Phe Gly Ile Ile Arg Asn Arg		
180	185	190
Met Met Ser Thr His Lys Ser Lys Lys Lys Ile Arg Glu Tyr Tyr Arg		
195	200	205
Leu Leu Asn Val Glu Glu Gly Cys Ser Ala Asp Glu Val Arg Glu Ser		
210	215	220
Phe His Lys Leu Ala Lys Gln Tyr His Pro Asp Ser Gly Ser Asn Thr		
225	230	235
Ala Asp Ser Ala Thr Phe Ile Arg Ile Glu Lys Ala Tyr Arg Lys Val		
245	250	255
Leu Ser His Val Ile Glu Gln Thr Asn Ala Ser Gln Ser Lys Gly Glu		
260	265	270
Glu Glu Glu Asp Val Glu Lys Phe Lys Tyr Lys Thr Pro Gln His Arg		
275	280	285
His Tyr Leu Ser Phe Glu Gly Ile Gly Phe Gly Thr Pro Thr Gln Arg		
290	295	300
Glu Lys His Tyr Arg Gln Phe Arg Ala Asp Arg Ala Ala Glu Gln Val		
305	310	315
Met Glu Tyr Gln Lys Gln Lys Leu Gln Ser Gln Tyr Phe Pro Asp Ser		

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325          330          335
Val Ile Val Lys Asn Ile Arg Gln Ser Lys Gln Gln Lys Ile Thr Gln
340          345          350
Ala Ile Glu Arg Leu Val Glu Asp Leu Ile Gln Glu Ser Met Ala Lys
355          360          365
Gly Asp Phe Asp Asn Leu Ser Gly Lys Gly Lys Pro Leu Lys Lys Phe
370          375          380
Ser Asp Cys Ser Tyr Ile Asp Pro Met Thr His Asn Leu Asn Arg Ile
385          390          395          400
Leu Ile Asp Asn Gly Tyr Gln Pro Glu Trp Ile Leu Lys Gln Lys Glu
405          410          415
Ile Ser Asp Thr Ile Glu Gln Leu Arg Glu Ala Ile Leu Val Ser Arg
420          425          430
Lys Lys Leu Gly Asn Pro Met Thr Pro Thr Glu Lys Lys Gln Trp Asn
435          440          445
His Val Cys Glu Gln Phe Gln Glu Asn Ile Arg Lys Leu Asn Lys Arg
450          455          460
Ile Asn Asp Phe Asn Leu Ile Val Pro Ile Leu Thr Arg Gln Lys Val
465          470          475          480
His Phe Asp Ala Gln Lys Glu Ile Val Arg Ala Gln Lys Ile Tyr Glu
485          490          495
Thr Leu Ile Lys Thr Lys Glu Val Thr Asp Arg Asn Pro Asn Asn Leu
500          505          510
Asp Gln Gly Glu Gly Glu Lys Thr Pro Glu Ile Lys Lys Gly Phe Leu
515          520          525
Asn Leu Met Asp Leu Val Glu Ile Tyr
530          535          537

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<210> 3115
<211> 678
<212> PRT
<213> Homo sapiens

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<400> 3115
Phe Arg His Arg Cys Gly Cys Leu Ser Tyr Cys Arg Ser Arg Arg Gly
1          5          10          15
Ile Arg Arg Val Glu Pro Leu Arg Arg Ala Arg Ala Arg Val Gly Pro
20          25          30
Arg Phe Arg Pro Leu Cys Arg Met Glu Ile Ile Arg Ser Asn Phe Lys
35          40          45
Ser Asn Leu His Lys Val Tyr Gln Ala Ile Glu Glu Ala Asp Phe Phe
50          55          60
Ala Ile Asp Gly Glu Phe Ser Gly Ile Ser Asp Gly Pro Ser Val Ser
65          70          75          80
Ala Leu Thr Asn Gly Phe Asp Thr Pro Glu Arg Tyr Gln Lys Leu
85          90          95
Lys Lys His Ser Met Asp Phe Leu Leu Phe Gln Phe Gly Leu Cys Thr
100          105          110
Phe Lys Tyr Asp Tyr Thr Asp Ser Lys Tyr Ile Thr Lys Ser Phe Asn
115          120          125
Phe Tyr Val Phe Pro Lys Pro Phe Asn Arg Ser Ser Pro Asp Val Lys
130          135          140
Phe Val Cys Gln Ser Ser Ile Asp Phe Leu Ala Ser Gln Gly Phe
145          150          155          160
Asp Phe Asn Lys Gly Phe Arg Lys Gly Ile Pro Tyr Leu Asn Gln Glu
165          170          175
Glu Glu Arg Gln Leu Arg Glu Gln Tyr Asp Glu Lys Arg Ser Gln Ala
180          185          190
Asn Gly Ala Gly Ala Leu Ser Tyr Val Ser Pro Asn Thr Ser Lys Cys
195          200          205
Pro Val Thr Ile Pro Glu Asp Gln Lys Lys Phe Ile Asp Gln Val Val

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210		215		220
Glu Lys Ile	Glu Asp Leu	Leu Gln Ser	Glu Glu Asn	Lys Asn Leu Asp
225		230		240
Leu Glu Pro	Cys Thr Gly	Phe Gln Arg	Lys Leu Ile	Tyr Gln Thr Leu
	245		250	255
Ser Trp Lys	Tyr Pro Lys	Gly Ile His	Val Glu Thr	Leu Glu Thr Glu
	260		265	270
Lys Lys Glu	Arg Tyr Ile	Val Ile Ser	Lys Val Asp	Glu Glu Glu Arg
	275		280	285
Lys Arg Arg	Glu Gln Gln	Lys His Ala	Lys Glu Gln	Glu Glu Leu Asn
	290		295	300
Asp Ala Val	Gly Phe Ser	Arg Val Ile	His Ala Ile	Ala Asn Ser Gly
305		310		320
Lys Leu Val	Ile Gly His	Asn Met Leu	Leu Asp Val	Met His Thr Val
	325		330	335
His Gln Phe	Tyr Cys Pro	Leu Pro Ala	Asp Leu Ser	Glu Phe Lys Glu
	340		345	350
Met Thr Thr	Cys Val Phe	Pro Arg Leu	Leu Asp Thr	Lys Leu Met Ala
	355		360	365
Ser Thr Gln	Pro Phe Lys	Asp Ile Ile	Asn Asn Thr	Ser Leu Ala Glu
	370		375	380
Leu Glu Lys	Arg Leu Lys	Glu Thr Pro	Phe Asn Pro	Pro Lys Val Glu
	385		390	400
Ser Ala Glu	Gly Phe Pro	Ser Tyr Asp	Thr Ala Ser	Glu Gln Leu His
	405		410	415
Glu Ala Gly	Tyr Asp Ala	Tyr Ile Thr	Gly Leu Cys	Phe Ile Ser Met
	420		425	430
Ala Asn Tyr	Leu Gly Ser	Phe Leu Ser	Pro Pro Lys	Ile His Val Ser
	435		440	445
Ala Arg Ser	Lys Leu Ile	Glu Pro Phe	Phe Asn Lys	Leu Phe Leu Met
	450		455	460
Arg Val Met	Asp Ile Pro	Tyr Leu Asn	Leu Glu Gly	Pro Asp Leu Gln
	465		470	480
Pro Lys Arg	Asp His Val	Leu His Val	Thr Phe Pro	Lys Glu Trp Lys
	485		490	495
Thr Ser Asp	Leu Tyr Gln	Leu Phe Ser	Ala Phe Gly	Asn Ile Gln Ile
	500		505	510
Ser Trp Ile	Asp Asp Thr	Ser Ala Phe	Val Ser Leu	Ser Gln Pro Glu
	515		520	525
Gln Val Lys	Ile Ala Val	Asn Thr Ser	Lys Tyr Ala	Glu Ser Tyr Arg
	530		535	540
Ile Gln Thr	Tyr Ala Glu	Tyr Met Gly	Arg Lys Gln	Glu Glu Lys Gln
	545		550	560
Ile Lys Arg	Lys Trp Thr	Glu Asp Ser	Trp Lys Glu	Ala Asp Ser Lys
	565		570	575
Arg Leu Asn	Pro Gln Cys	Ile Pro Tyr	Thr Leu Gln	Asn His Tyr Tyr
	580		585	590
Arg Asn Asn	Ser Phe Thr	Ala Pro Ser	Thr Val Gly	Lys Arg Asn Leu
	595		600	605
Ser Pro Ser	Gln Glu Glu	Ala Gly Leu	Glu Asp Gly	Val Ser Gly Glu
	610		615	620
Ile Ser Asp	Thr Glu Leu	Glu Gln Thr	Asp Ser Cys	Ala Glu Pro Leu
	625		630	640
Ser Glu Gly	Arg Lys Lys	Ala Lys Lys	Leu Lys Arg	Met Lys Lys Glu
	645		650	655
Leu Ser Pro	Ala Gly Ser	Ile Ser Lys	Asn Ser Pro	Ala Thr Leu Phe
	660		665	670
Glu Val Pro	Asp Thr Trp			
	675		678	

<210> 3116

<211> 479

<212> PRT

<213> Homo sapiens

<400> 3116

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Thr Arg Glu Ala Pro Met Ala Leu Ala Val Ala Pro Trp Gly Arg Gln
 1          5          10          15
Trp Glu Glu Ala Arg Ala Leu Gly Arg Ala Val Arg Met Leu Gln Arg
          20          25          30
Leu Glu Glu Gln Cys Val Asp Pro Arg Leu Ser Val Ser Pro Pro Ser
          35          40          45
Leu Arg Asp Leu Leu Pro Arg Thr Ala Gln Leu Leu Arg Glu Val Ala
          50          55          60
His Ser Arg Arg Ala Ala Gly Gly Gly Gly Pro Gly Gly Pro Gly Gly
          65          70          75          80
Ser Gly Asp Phe Leu Leu Ile Tyr Leu Ala Asn Leu Glu Ala Lys Ser
          85          90          95
Arg Gln Val Ala Ala Leu Leu Pro Pro Arg Gly Arg Arg Ser Ala Asn
          100          105          110
Asp Glu Leu Phe Arg Ala Gly Ser Arg Leu Arg Arg Gln Leu Ala Lys
          115          120          125
Leu Ala Ile Ile Phe Ser His Met His Ala Glu Leu His Ala Leu Phe
          130          135          140
Pro Gly Gly Lys Tyr Cys Gly His Met Tyr Gln Leu Thr Lys Ala Pro
          145          150          155          160
Ala His Thr Phe Trp Arg Glu Ser Cys Gly Ala Arg Cys Val Leu Pro
          165          170          175
Trp Ala Glu Phe Glu Ser Leu Leu Gly Thr Cys His Pro Val Glu Pro
          180          185          190
Gly Cys Thr Ala Leu Ala Leu Arg Thr Thr Ile Asp Leu Thr Cys Ser
          195          200          205
Gly His Val Ser Ile Phe Glu Phe Asp Val Phe Thr Arg Leu Phe Gln
          210          215          220
Pro Trp Pro Thr Leu Leu Lys Asn Trp Gln Leu Leu Ala Val Asn His
          225          230          235          240
Pro Gly Tyr Met Ala Phe Leu Thr Tyr Asp Glu Val Gln Glu Arg Leu
          245          250          255
Gln Ala Cys Arg Asp Lys Pro Gly Ser Tyr Ile Phe Arg Pro Ser Cys
          260          265          270
Thr Arg Leu Gly Gln Trp Ala Ile Gly Tyr Val Ser Ser Asp Gly Ser
          275          280          285
Ile Leu Gln Thr Ile Pro Ala Asn Lys Pro Leu Ser Gln Val Leu Leu
          290          295          300
Glu Gly Gln Lys Asp Gly Phe Tyr Leu Tyr Pro Asp Gly Lys Thr His
          305          310          315          320
Asn Pro Asp Leu Thr Glu Leu Gly Gln Ala Glu Pro Gln Gln Arg Ile
          325          330          335
His Val Ser Glu Gln Leu Gln Leu Tyr Trp Ala Met Asp Ser Thr
          340          345          350
Phe Glu Leu Cys Lys Ile Cys Ala Glu Ser Asn Lys Asp Val Lys Ile
          355          360          365
Glu Pro Cys Gly His Leu Leu Cys Ser Cys Cys Leu Ala Ala Trp Gln
          370          375          380
His Ser Asp Ser Gln Thr Cys Pro Phe Cys Arg Cys Glu Ile Lys Gly
          385          390          395          400
Trp Glu Ala Val Ser Ile Tyr Gln Phe His Gly Gln Ala Thr Ala Glu
          405          410          415
Asp Ser Gly Asn Ser Ser Asp Gln Glu Gly Arg Glu Leu Glu Leu Gly
          420          425          430
Gln Val Pro Leu Ser Ala Pro Pro Leu Pro Pro Arg Pro Asp Leu Pro
          435          440          445
Pro Arg Lys Pro Arg Asn Ala Gln Pro Lys Val Arg Leu Leu Lys Gly
          450          455          460
Asn Ser Pro Pro Ala Ala Leu Gly Pro Gln Asp Pro Ala Pro Ala

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465

470

475

479

<210> 3117

<211> 1084

<212> PRT

<213> Homo sapiens

<400> 3117

Glu Arg His Ser Ser Pro Leu Leu Gln His Ile Leu Thr His Ala Leu
 1 5 10 15
 Met Arg Asn Lys Lys His Ser Asn Asn Trp Leu Ala Gln His Trp Phe
 20 25 30
 Gln Ser Ser Ile Ile Leu Cys Phe Ser Pro Val Gly Arg Thr Leu Arg
 35 40 45
 Val Arg Ala Arg Lys Phe Pro Ala Ile Val Asn Cys Thr Ala Ile Asp
 50 55 60
 Trp Phe His Ala Trp Pro Gln Glu Ala Leu Val Ser Val Ser Arg Arg
 65 70 75 80
 Phe Ile Glu Glu Thr Lys Gly Ile Glu Pro Val His Lys Asp Ser Ile
 85 90 95
 Ser Leu Phe Met Ala His Val His Thr Thr Val Asn Glu Met Ser Thr
 100 105 110
 Arg Tyr Tyr Gln Asn Glu Arg Arg His Asn Tyr Thr Thr Pro Lys Ser
 115 120 125
 Phe Leu Glu Gln Ile Ser Leu Phe Lys Asn Leu Leu Lys Lys Lys Gln
 130 135 140
 Asn Glu Val Ser Glu Lys Lys Glu Arg Leu Val Asn Gly Ile Gln Lys
 145 150 155 160
 Leu Lys Thr Thr Ala Ser Gln Val Gly Asp Leu Lys Ala Arg Leu Ala
 165 170 175
 Ser Gln Glu Ala Glu Leu Gln Leu Arg Asn His Asp Ala Glu Ala Leu
 180 185 190
 Ile Thr Lys Ile Gly Leu Gln Thr Glu Lys Val Ser Arg Glu Lys Thr
 195 200 205
 Ile Ala Asp Ala Glu Glu Arg Lys Val Thr Ala Ile Gln Thr Glu Val
 210 215 220
 Phe Gln Lys Gln Arg Glu Cys Glu Ala Asp Leu Leu Lys Ala Glu Pro
 225 230 235 240
 Ala Leu Val Ala Ala Thr Ala Ala Leu Asn Thr Leu Asn Arg Val Asn
 245 250 255
 Leu Ser Glu Leu Lys Ala Phe Pro Asn Pro Pro Ile Ala Val Thr Asn
 260 265 270
 Val Thr Ala Ala Val Met Val Leu Leu Ala Pro Arg Gly Arg Val Pro
 275 280 285
 Lys Asp Arg Ser Trp Lys Ala Ala Lys Val Phe Met Gly Lys Val Asp
 290 295 300
 Asp Phe Leu Gln Ala Leu Ile Asn Tyr Asp Lys Glu His Ile Pro Glu
 305 310 315 320
 Asn Cys Leu Lys Val Val Asn Glu His Tyr Leu Lys Asp Pro Glu Phe
 325 330 335
 Asn Pro Asn Leu Ile Arg Thr Lys Ser Phe Ala Ala Ala Gly Leu Cys
 340 345 350
 Ala Trp Val Ile Asn Ile Ile Lys Phe Tyr Glu Val Tyr Cys Asp Val
 355 360 365
 Glu Pro Lys Arg Gln Ala Leu Ala Gln Ala Asn Leu Glu Leu Ala Ala
 370 375 380
 Ala Thr Glu Lys Leu Glu Ala Ile Arg Lys Lys Leu Val Val Ser Ala
 385 390 395 400
 Asn Tyr Asp Ile Glu Lys Ser Glu Lys Ile Arg Trp Gly Gln Ser Ile
 405 410 415
 Lys Ser Phe Glu Ala Gln Glu Lys Thr Leu Cys Gly Asp Val Leu Leu

4796

930 935 940
 Ala Thr Pro Ile Phe Phe Ile Leu Ser Pro Gly Val Asp Ala Leu Lys
 945 950 955 960
 Asp Leu Glu Ile Leu Gly Lys Arg Leu Gly Phe Thr Ile Asp Ser Gly
 965 970 975
 Lys Phe His Asn Val Ser Leu Gly Gln Gly Gln Glu Thr Val Ala Glu
 980 985 990
 Val Ala Leu Glu Lys Ala Ser Lys Gly Gly His Trp Val Ile Leu Gln
 995 1000 1005
 Asn Val His Leu Val Ala Lys Trp Leu Gly Thr Leu Glu Lys Leu Leu
 1010 1015 1020
 Glu Arg Phe Ser Gln Gly Ser His Arg Asp Tyr Arg Val Phe Met Ser
 1025 1030 1035 1040
 Ala Glu Ser Ala Pro Thr Pro Asp Glu His Ile Ile Pro Gln Gly Leu
 1045 1050 1055
 Leu Glu Asn Ser Ile Lys Ile Thr Asn Glu Pro Pro Thr Gly Met Leu
 1060 1065 1070
 Ala Asn Leu His Ala Ala Leu Tyr Asn Phe Asp Gln
 1075 1080 1084

<210> 3118
 <211> 75
 <212> PRT
 <213> Homo sapiens

<400> 3118
 Pro Tyr Ser Leu Ser Thr Ser Cys Leu Gly Ser Pro Thr Ser Pro Arg
 1 5 10 15
 Leu Glu Met Asp Pro Asn Cys Ser Cys Ala Thr Gly Gly Ser Cys Thr
 20 25 30
 Cys Thr Gly Ser Cys Lys Cys Lys Glu Cys Lys Cys Asn Ser Cys Lys
 35 40 45
 Lys Ser Glu Cys Gly Ala Ile Ser Arg Asn Leu Gly Leu Ser Gln Val
 50 55 60
 Arg Gly Arg Lys Pro Glu Leu Gly Met Glu Glu
 65 70 75

<210> 3119
 <211> 959
 <212> PRT
 <213> Homo sapiens

<400> 3119
 Pro Leu Ala Thr Leu Thr Met Glu Glu Gln Gly His Ser Glu Met Glu
 1 5 10 15
 Ile Ile Pro Ser Glu Ser His Pro His Ile Gln Leu Leu Lys Ser Asn
 20 25 30
 Arg Glu Leu Leu Val Thr His Ile Arg Asn Thr Gln Cys Leu Val Asp
 35 40 45
 Asn Leu Leu Lys Asn Asp Tyr Phe Ser Ala Glu Asp Ala Glu Ile Val
 50 55 60
 Cys Ala Cys Pro Thr Gln Pro Asp Lys Val Arg Lys Ile Leu Asp Leu
 65 70 75 80
 Val Gln Ser Lys Gly Glu Glu Val Ser Glu Phe Phe Leu Tyr Leu Leu
 85 90 95
 Gln Gln Leu Ala Asp Ala Tyr Val Asp Leu Arg Pro Trp Leu Leu Glu
 100 105 110
 Ile Gly Phe Ser Pro Ser Leu Leu Thr Gln Ser Lys Val Val Val Asn

4798 ·

625				630					635				640			
Leu	Pro	Arg	Val	Gln	Val	Glu	Ser	Phe	Asn	Gln	Val	Gln	Ala	Met	Pro	
				645					650				655			
Thr	Phe	Ile	Trp	Met	Leu	Arg	Cys	Ile	Tyr	Glu	Thr	Gln	Ser	Gln	Lys	
			660					665					670			
Val	Gly	Gln	Leu	Ala	Ala	Arg	Gly	Ile	Cys	Ala	Asn	Tyr	Leu	Lys	Leu	
		675					680					685				
Thr	Tyr	Cys	Asn	Ala	Cys	Ser	Ala	Asp	Cys	Ser	Ala	Leu	Ser	Phe	Val	
	690					695					700					
Leu	His	His	Phe	Pro	Lys	Arg	Leu	Ala	Leu	Asp	Leu	Asp	Asn	Asn	Asn	
705					710					715				720		
Leu	Asn	Asp	Tyr	Gly	Val	Arg	Glu	Leu	Gln	Pro	Cys	Phe	Ser	Arg	Leu	
			725					730						735		
Thr	Val	Leu	Arg	Leu	Ser	Val	Asn	Gln	Ile	Thr	Asp	Gly	Gly	Val	Lys	
			740					745					750			
Val	Leu	Ser	Glu	Glu	Leu	Thr	Lys	Tyr	Lys	Ile	Val	Thr	Tyr	Leu	Gly	
		755				760						765				
Leu	Tyr	Asn	Asn	Gln	Ile	Thr	Asp	Val	Gly	Ala	Arg	Tyr	Val	Thr	Lys	
	770					775					780					
Ile	Leu	Asp	Glu	Cys	Lys	Gly	Leu	Thr	His	Leu	Lys	Leu	Gly	Lys	Asn	
785					790					795				800		
Lys	Ile	Thr	Ser	Glu	Gly	Gly	Lys	Tyr	Leu	Ala	Leu	Ala	Val	Lys	Asn	
			805					810						815		
Ser	Lys	Ser	Ile	Ser	Glu	Val	Gly	Met	Trp	Gly	Asn	Gln	Val	Gly	Asp	
		820					825						830			
Glu	Gly	Ala	Lys	Ala	Phe	Ala	Glu	Ala	Leu	Arg	Asn	His	Pro	Ser	Leu	
		835				840						845				
Thr	Thr	Leu	Ser	Leu	Ala	Ser	Asn	Gly	Ile	Ser	Thr	Glu	Gly	Gly	Lys	
	850					855					860					
Ser	Leu	Ala	Arg	Ala	Leu	Gln	Gln	Asn	Thr	Ser	Leu	Glu	Ile	Leu	Trp	
865					870				875					880		
Leu	Thr	Gln	Asn	Glu	Leu	Asn	Asp	Glu	Val	Ala	Glu	Ser	Leu	Ala	Glu	
			885					890						895		
Met	Leu	Lys	Val	Asn	Gln	Thr	Leu	Lys	His	Leu	Trp	Leu	Ile	Gln	Asn	
		900						905						910		
Gln	Ile	Thr	Ala	Lys	Gly	Thr	Ala	Gln	Leu	Ala	Asp	Ala	Leu	Gln	Ser	
		915				920						925				
Asn	Thr	Gly	Ile	Thr	Glu	Ile	Cys	Leu	Asn	Gly	Asn	Leu	Ile	Lys	Pro	
	930					935					940					
Glu	Glu	Ala	Lys	Val	Tyr	Glu	Asp	Glu	Lys	Arg	Ile	Ile	Cys	Phe		
945					950					955				959		

<210> 3120

<211> 320

<212> PRT

<213> Homo sapiens

<400> 3120

Gln	Leu	Trp	Gly	Phe	Ala	Ala	Gly	Ser	Asp	Ser	Arg	Pro	Ala	Met	Gly
1				5					10					15	
Cys	Asp	Gly	Gly	Thr	Ile	Pro	Lys	Arg	His	Glu	Leu	Val	Lys	Gly	Pro
		20					25						30		
Lys	Lys	Val	Glu	Lys	Val	Asp	Lys	Asp	Ala	Glu	Leu	Val	Ala	Gln	Trp
		35				40						45			
Asn	Tyr	Cys	Thr	Leu	Ser	Gln	Glu	Ile	Leu	Arg	Arg	Pro	Ile	Val	Ala
	50					55				60					
Cys	Glu	Leu	Gly	Arg	Leu	Tyr	Asn	Lys	Asp	Ala	Val	Ile	Glu	Phe	Leu
65				70					75					80	
Leu	Asp	Lys	Ser	Ala	Glu	Lys	Ala	Leu	Gly	Lys	Ala	Ala	Ser	His	Ile
			85					90					95		
Lys	Ser	Ile	Lys	Asn	Val	Thr	Glu	Leu	Lys	Leu	Ser	Asp	Asn	Pro	Ala

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<210> 3121
<211> 495
<212> PRT
<213> Homo sapiens
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4800

195	200	205
Leu Arg Ser Lys Ile Gln	Lys Leu Glu Ser Asp Val	Ser Ala Gln Met
210	215	220
Glu Tyr Cys Arg Thr Pro	Cys Thr Val Ser Cys Asn	Ile Pro Val Val
225	230	235
Ser Gly Lys Glu Cys Glu	Glu Ile Ile Arg Lys Gly	Gly Glu Thr Ser
240	245	250
Glu Met Tyr Leu Ile Gln	Pro Asp Ser Ser Val Lys	Pro Tyr Arg Val
255	260	265
Tyr Cys Asp Met Asn Thr	Glu Asn Gly Gly Trp Thr	Val Ile Gln Asn
270	275	280
Arg Gln Asp Gly Ser Val	Asp Phe Gly Arg Lys Trp	Asp Pro Tyr Lys
285	290	295
Gln Gly Phe Gly Asn Val	Ala Thr Asn Thr Asp Gly	Lys Asn Tyr Cys
300	305	310
Gly Leu Pro Gly Glu Tyr	Trp Leu Gly Asn Asp Lys	Ile Ser Gln Leu
315	320	325
Thr Arg Met Gly Pro Thr	Glu Leu Leu Ile Glu Met	Glu Asp Trp Lys
330	335	340
Gly Asp Lys Val Lys Ala	His Tyr Gly Gly Phe Thr	Val Gln Asn Glu
345	350	355
Ala Asn Lys Tyr Gln Ile	Ser Val Asn Lys Tyr Arg	Gly Thr Ala Gly
360	365	370
Asn Ala Leu Met Asp Gly	Ala Ser Gln Leu Met Gly	Glu Asn Arg Thr
375	380	385
Met Thr Ile His Asn Gly	Met Phe Phe Ser Thr Tyr	Asp Arg Asp Asn
390	395	400
Asp Gly Trp Leu Thr Ser	Asp Pro Arg Lys Gln Cys	Ser Lys Glu Asp
405	410	415
Gly Gly Gly Trp Trp Tyr	Asn Arg Cys His Ala Ala	Asn Pro Asn Gly
420	425	430
Arg Tyr Tyr Trp Gly Gly	Gln Tyr Thr Trp Asp Met	Ala Lys His Gly
435	440	445
Thr Asp Asp Gly Val Val	Trp Met Asn Trp Lys Gly	Ser Trp Tyr Ser
450	455	460
Met Lys Lys Met Ser Met	Lys Ile Arg Pro Phe Phe	Pro Gln Gln
465	470	475
480	485	490
495		

<210> 3122

<211> 495

<212> PRT

<213> Homo sapiens

<400> 3122

His Ala Ser Gly Pro Thr	Arg Pro Val Ser Trp Ser	Phe His Lys Leu
1	5	10
Lys Thr Met Lys His Leu	Leu Leu Leu Cys Val	Phe Leu Val
15	20	25
Lys Ser Gln Gly Val Asn	Asp Asn Glu Glu Gly Phe	Phe Ser Ala Arg
30	35	40
Gly His Arg Pro Leu Asp	Lys Lys Arg Glu Glu Ala	Pro Ser Leu Arg
45	50	55
Pro Ala Pro Pro Pro Ile	Ser Gly Gly Gly Tyr Arg	Ala Arg Pro Ala
60	65	70
Lys Ala Ala Ala Thr Gln	Lys Lys Val Glu Arg Lys	Ala Pro Asp Ala
75	80	85
Gly Gly Cys Leu His Ala	Asp Pro Asp Leu Gly Val	Leu Cys Pro Thr
90	95	100
Gly Cys Gln Leu Gln Glu	Ala Leu Leu Gln Gln Glu	Arg Pro Ile Arg
105	110	115
Asn Ser Val Asp Glu Leu	Asn Asn Asn Val Glu Ala	Val Ser Gln Thr
120	125	

130	135	140
Ser Ser Ser Ser Phe Gln Tyr Met Tyr Leu Leu Lys Asp Leu Trp Gln		
145	150	155
Lys Arg Gln Lys Gln Val Lys Asp Asn Glu Asn Val Val Asn Glu Tyr		160
	165	170
Ser Ser Glu Leu Glu Lys His Gln Leu Tyr Ile Asp Glu Thr Val Asn		175
	180	185
Ser Asn Ile Pro Thr Asn Leu Arg Val Leu Arg Ser Ile Leu Glu Asn		190
	195	200
Leu Arg Ser Lys Ile Gln Lys Leu Glu Ser Asp Val Ser Ala Gln Met		205
	210	215
Glu Tyr Cys Arg Thr Pro Cys Thr Val Ser Cys Asn Ile Pro Val Val		220
225	230	235
Ser Gly Lys Glu Cys Glu Glu Ile Ile Arg Lys Gly Gly Glu Thr Ser		240
	245	250
Glu Met Tyr Leu Ile Gln Pro Asp Ser Ser Val Lys Pro Tyr Arg Val		255
	260	265
Tyr Cys Asp Met Asn Thr Glu Asn Gly Gly Trp Thr Val Ile Gln Asn		270
	275	280
Arg Gln Asp Gly Ser Val Asp Phe Gly Arg Lys Trp Asp Pro Tyr Lys		285
	290	295
Gln Gly Phe Gly Asn Val Ala Thr Asn Thr Asp Gly Lys Asn Tyr Cys		300
305	310	315
Gly Leu Pro Gly Glu Tyr Trp Leu Gly Asn Asp Lys Ile Ser Gln Leu		320
	325	330
Thr Arg Met Gly Pro Thr Glu Leu Leu Ile Glu Met Glu Asp Trp Lys		335
	340	345
Gly Asp Lys Val Lys Ala His Tyr Gly Gly Phe Thr Val Gln Asn Glu		350
	355	360
Ala Asn Lys Tyr Gln Ile Ser Val Asn Lys Tyr Arg Gly Thr Ala Gly		365
	370	375
Asn Ala Leu Met Asp Gly Ala Ser Gln Leu Met Gly Glu Asn Arg Thr		380
385	390	395
Met Thr Ile His Asn Gly Met Phe Phe Ser Thr Tyr Asp Arg Asp Asn		400
	405	410
Asp Gly Trp Leu Thr Ser Asp Pro Arg Lys Gln Cys Ser Lys Glu Asp		415
	420	425
Gly Gly Gly Trp Trp Tyr Asn Arg Cys His Ala Ala Asn Pro Asn Gly		430
	435	440
Arg Tyr Tyr Trp Gly Gly Gln Tyr Thr Trp Asp Met Ala Lys His Gly		445
	450	455
Thr Asp Asp Gly Val Val Trp Met Asn Trp Lys Gly Ser Trp Tyr Ser		460
465	470	475
Met Lys Lys Met Ser Met Lys Ile Arg Pro Phe Phe Pro Gln Gln		480
	485	490
		495

<210> 3123

<211> 495

<212> PRT

<213> Homo sapiens

<400> 3123

His Ala Ser Gly Pro Thr Arg Pro Val Ser Trp Ser Phe His Lys Leu	
1	5
Lys Thr Met Lys His Leu Leu Leu Leu Leu Cys Val Phe Leu Val	
	10
	20
Lys Ser Gln Gly Val Asn Asp Asn Glu Glu Gly Phe Phe Ser Ala Arg	
	25
	30
	35
Gly His Arg Pro Leu Asp Lys Lys Arg Glu Glu Ala Pro Ser Leu Arg	
	40
	45
	50
Pro Ala Pro Pro Pro Ile Ser Gly Gly Gly Tyr Arg Ala Arg Pro Ala	
	55
	60

65					70					75				80	
Lys	Ala	Ala	Ala	Thr	Gln	Lys	Lys	Val	Glu	Arg	Lys	Ala	Pro	Asp	Ala
				85						90				95	
Gly	Gly	Cys	Leu	His	Ala	Asp	Pro	Asp	Leu	Gly	Val	Leu	Cys	Pro	Thr
			100					105					110		
Gly	Cys	Gln	Leu	Gln	Glu	Ala	Leu	Leu	Gln	Gln	Glu	Arg	Pro	Ile	Arg
		115					120					125			
Asn	Ser	Val	Asp	Glu	Leu	Asn	Asn	Asn	Val	Glu	Ala	Val	Ser	Gln	Thr
		130				135					140				
Ser	Ser	Ser	Ser	Phe	Gln	Tyr	Met	Tyr	Leu	Leu	Lys	Asp	Leu	Trp	Gln
				150						155				160	
Lys	Arg	Gln	Lys	Gln	Val	Lys	Asp	Asn	Glu	Asn	Val	Val	Asn	Glu	Tyr
				165					170					175	
Ser	Ser	Glu	Leu	Glu	Lys	His	Gln	Leu	Tyr	Ile	Asp	Glu	Thr	Val	Asn
			180				185					190			
Ser	Asn	Ile	Pro	Thr	Asn	Leu	Arg	Val	Leu	Arg	Ser	Ile	Leu	Glu	Asn
		195				200					205				
Leu	Arg	Ser	Lys	Ile	Gln	Lys	Leu	Glu	Ser	Asp	Val	Ser	Ala	Gln	Met
		210				215					220				
Glu	Tyr	Cys	Arg	Thr	Pro	Cys	Thr	Val	Ser	Cys	Asn	Ile	Pro	Val	Val
		225			230					235				240	
Ser	Gly	Lys	Glu	Cys	Glu	Glu	Ile	Ile	Arg	Lys	Gly	Gly	Glu	Thr	Ser
			245						250					255	
Glu	Met	Tyr	Leu	Ile	Gln	Pro	Asp	Ser	Ser	Val	Lys	Pro	Tyr	Arg	Val
			260				265					270			
Tyr	Cys	Asp	Met	Asn	Thr	Glu	Asn	Gly	Gly	Trp	Thr	Val	Ile	Gln	Asn
		275					280					285			
Arg	Gln	Asp	Gly	Ser	Val	Asp	Phe	Gly	Arg	Lys	Trp	Asp	Pro	Tyr	Lys
		290				295					300				
Gln	Gly	Phe	Gly	Asn	Val	Ala	Thr	Asn	Thr	Asp	Gly	Lys	Asn	Tyr	Cys
		305			310					315				320	
Gly	Leu	Pro	Gly	Glu	Tyr	Trp	Leu	Gly	Asn	Asp	Lys	Ile	Ser	Gln	Leu
			325						330					335	
Thr	Arg	Met	Gly	Pro	Thr	Glu	Leu	Leu	Ile	Glu	Met	Glu	Asp	Trp	Lys
			340				345					350			
Gly	Asp	Lys	Val	Lys	Ala	His	Tyr	Gly	Gly	Phe	Thr	Val	Gln	Asn	Glu
		355				360						365			
Ala	Asn	Lys	Tyr	Gln	Ile	Ser	Val	Asn	Lys	Tyr	Arg	Gly	Thr	Ala	Gly
		370				375					380				
Asn	Ala	Leu	Met	Asp	Gly	Ala	Ser	Gln	Leu	Met	Gly	Glu	Asn	Arg	Thr
		385			390					395				400	
Met	Thr	Ile	His	Asn	Gly	Met	Phe	Phe	Ser	Thr	Tyr	Asp	Arg	Asp	Asn
			405						410					415	
Asp	Gly	Trp	Leu	Thr	Ser	Asp	Pro	Arg	Lys	Gln	Cys	Ser	Lys	Glu	Asp
			420					425					430		
Gly	Gly	Gly	Trp	Trp	Tyr	Asn	Arg	Cys	His	Ala	Ala	Asn	Pro	Asn	Gly
		435				440						445			
Arg	Tyr	Tyr	Trp	Gly	Gly	Gln	Tyr	Thr	Trp	Asp	Met	Ala	Lys	His	Gly
		450				455					460				
Thr	Asp	Asp	Gly	Val	Val	Trp	Met	Asn	Trp	Lys	Gly	Ser	Trp	Tyr	Ser
		465			470					475				480	
Met	Lys	Lys	Met	Ser	Met	Lys	Ile	Arg	Pro	Phe	Phe	Pro	Gln	Gln	
			485						490					495	

<210> 3124

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3124

Arg Val Asp Asp Phe Val Leu Leu Arg Ser Arg Leu Ala Leu Arg Trp

1	5	10	15
Leu Ser His Val Arg Arg Pro Ser Arg Arg Val Pro Arg Met Pro Arg			
20	25	30	
Gly Ser Arg Ser Arg Thr Ser Arg Met Ala Pro Pro Ala Ser Arg Ala			
35	40	45	
Pro Gln Met Arg Ala Ala Pro Arg Pro Ala Pro Val Ala Gln Pro Pro			
50	55	60	
Ala Ala Ala Pro Pro Ser Ala Val Gly Ser Ser Ala Ala Ala Pro Arg			
65	70	75	80
Gln Pro Gly Leu Met Ala Gln Met Ala Thr Thr Ala Ala Gly Val Ala			
85	90	95	
Val Gly Ser Ala Val Gly His Thr Leu Gly His Ala Ile Thr Gly Gly			
100	105	110	
Phe Ser Gly Gly Ser Asn Ala Glu Pro Ala Arg Pro Asp Ile Thr Tyr			
115	120	125	
Gln Glu Pro Gln Gly Thr Gln Pro Ala Gln Gln Gln Gln Pro Cys Leu			
130	135	140	
Tyr Glu Ile Lys Gln Phe Leu Glu Cys Ala Gln Asn Gln Gly Asp Ile			
145	150	155	160
Lys Leu Cys Glu Gly Phe Asn Glu Val Leu Lys Gln Cys Arg Leu Ala			
165	170	175	
Asn Gly Leu Ala			
180			

<210> 3125
 <211> 189
 <212> PRT
 <213> Homo sapiens

<400> 3125	
Gly Asn Ser Tyr Asn His Arg Ser Leu Ala Ala Tyr Pro Tyr Met Ser	
1	5
His Ser Gln His Ser Pro Tyr Leu Gln Ser Tyr His Asn Ser Ser Ala	
20	25
Ala Ala Gln Thr Arg Gly Asp Asp Thr Asp Gln Gln Lys Thr Thr Val	
35	40
Ile Glu Asn Gly Glu Ile Arg Phe Asn Gly Lys Gly Lys Lys Ile Arg	
50	55
Lys Pro Arg Thr Ile Tyr Ser Ser Leu Gln Leu Gln Ala Leu Asn His	
65	70
Arg Phe Gln Gln Thr Gln Tyr Leu Ala Leu Pro Glu Arg Ala Glu Leu	
85	90
Ala Ala Ser Leu Gly Leu Thr Gln Thr Gln Val Lys Ile Trp Phe Gln	
100	105
Asn Lys Arg Ser Lys Phe Lys Lys Leu Leu Lys Gln Gly Ser Asn Pro	
115	120
His Glu Ser Asp Pro Leu Gln Gly Ser Ala Ala Leu Ser Pro Arg Ser	
130	135
Pro Ala Leu Pro Pro Val Trp Asp Val Ser Ala Ser Ala Lys Gly Val	
145	150
Ser Met Pro Pro Asn Ser Tyr Met Pro Gly Tyr Ser His Trp Tyr Ser	
165	170
Ser Pro His Gln Asp Thr Met Gln Arg Pro Gln Met Met	
180	185
	189

<210> 3126
 <211> 1778
 <212> PRT
 <213> Homo sapiens

<400> 3126

Leu	Ser	Val	Phe	Phe	Pro	Ile	Pro	Val	Asp	Gly	Arg	Asp	Arg	Gly	Ser
1				5					10					15	
Asn	Pro	Ser	Leu	Glu	Ser	Thr	Ser	Ser	Glu	Leu	Ser	Thr	Ser	Thr	Ser
			20					25					30		
Glu	Gly	Ser	Leu	Ser	Ala	Met	Ser	Gly	Arg	Asn	Glu	Leu	His	Ser	Arg
		35					40					45			
Leu	His	Pro	His	Pro	Gln	Ser	Ser	Leu	Ile	Pro	Met	Met	Phe	Ser	Pro
	50				55						60				
Pro	Glu	Ser	Leu	Leu	Ala	Ser	Cys	Ile	Leu	Arg	Gly	Asn	Phe	Ala	Glu
65					70					75				80	
Ala	His	Gln	Val	Leu	Phe	Thr	Phe	Asn	Leu	Lys	Ser	Ser	Pro	Ser	Ser
				85				90						95	
Gly	Glu	Leu	Met	Phe	Met	Glu	Arg	Tyr	Gln	Glu	Val	Ile	Gln	Glu	Leu
			100					105					110		
Ala	Gln	Val	Glu	His	Lys	Ile	Glu	Asn	Gln	Asn	Ser	Asp	Ala	Gly	Ser
	115						120					125			
Ser	Thr	Ile	Arg	Arg	Thr	Gly	Ser	Gly	Arg	Ser	Thr	Leu	Gln	Ala	Ile
	130					135					140				
Gly	Ser	Ala	Ala	Ala	Ala	Gly	Met	Val	Phe	Tyr	Ser	Ile	Ser	Asp	Val
145					150					155					160
Thr	Asp	Lys	Leu	Leu	Asn	Thr	Ser	Gly	Asp	Pro	Ile	Pro	Met	Leu	Gln
				165				170						175	
Glu	Asp	Phe	Trp	Ile	Ser	Thr	Ala	Leu	Val	Glu	Pro	Thr	Ala	Pro	Leu
			180					185					190		
Arg	Glu	Val	Leu	Glu	Asp	Leu	Ser	Pro	Pro	Ala	Met	Ala	Ala	Phe	Asp
	195						200					205			
Leu	Ala	Cys	Ser	Gln	Cys	Gln	Leu	Trp	Lys	Thr	Cys	Lys	Gln	Leu	Leu
	210					215					220				
Glu	Thr	Ala	Glu	Arg	Arg	Leu	Asn	Ser	Ser	Leu	Glu	Arg	Arg	Gly	Arg
225					230					235					240
Arg	Ile	Asp	His	Val	Leu	Leu	Asn	Ala	Asp	Gly	Ile	Arg	Gly	Phe	Pro
				245					250					255	
Val	Val	Leu	Gln	Gln	Ile	Ser	Lys	Ser	Leu	Asn	Tyr	Leu	Leu	Met	Ser
			260					265					270		
Ala	Ser	Gln	Thr	Lys	Ser	Glu	Ser	Val	Glu	Glu	Lys	Gly	Gly	Gly	Pro
		275					280					285			
Pro	Arg	Cys	Ser	Ile	Thr	Glu	Leu	Leu	Gln	Met	Cys	Trp	Pro	Ser	Leu
	290					295					300				
Ser	Glu	Asp	Cys	Val	Ala	Ser	His	Thr	Thr	Leu	Ser	Gln	Gln	Leu	Asp
305					310					315					320
Gln	Val	Leu	Gln	Ser	Leu	Arg	Glu	Ala	Leu	Glu	Leu	Pro	Glu	Pro	Arg
				325					330					335	
Thr	Pro	Pro	Leu	Ser	Ser	Leu	Val	Glu	Gln	Ala	Ala	Gln	Lys	Ala	Pro
			340					345					350		
Glu	Ala	Glu	Ala	His	Pro	Val	Gln	Ile	Gln	Thr	Gln	Leu	Gln	Lys	
	355						360					365			
Asn	Leu	Gly	Lys	Gln	Thr	Pro	Ser	Gly	Ser	Arg	Gln	Met	Asp	Tyr	Leu
	370					375					380				
Gly	Thr	Phe	Phe	Ser	Tyr	Cys	Ser	Thr	Leu	Ala	Ala	Val	Leu	Leu	Gln
385					390					395					400
Ser	Leu	Ser	Ser	Glu	Pro	Asp	His	Val	Glu	Val	Lys	Val	Gly	Asn	Pro
				405					410					415	
Phe	Val	Leu	Leu	Gln	Gln	Ser	Ser	Ser	Gln	Leu	Val	Ser	His	Leu	Leu
				420				425					430		
Phe	Glu	Arg	Gln	Val	Pro	Pro	Glu	Arg	Leu	Ala	Ala	Leu	Leu	Ala	Gln
	435						440					445			
Glu	Asn	Leu	Ser	Leu	Ser	Val	Pro	Gln	Val	Ile	Val	Ser	Cys	Cys	Cys
	450					455					460				
Glu	Pro	Leu	Ala	Leu	Cys	Ser	Ser	Arg	Gln	Ser	Gln	Gln	Thr	Ser	Ser
465					470					475				480	
Leu	Leu	Thr	Arg	Leu	Gly	Thr	Leu	Ala	Gln	Leu	His	Ala	Ser	His	Cys

4806

995	1000	1005
Ser Ile His Ser Pro Ser Leu Arg Glu Arg Ser Phe Pro Pro Thr Gln		
1010	1015	1020
Pro Ser Gln Glu Phe Val Pro Pro Ala Thr Pro Pro Ala Arg His Gln		
1025	1030	1035
Trp Val Pro Asp Glu Thr Glu Ser Ile Cys Met Val Cys Cys Arg Glu		1040
	1045	1050
His Phe Thr Met Phe Asn Arg Arg His His Cys Arg Arg Cys Gly Arg		1055
	1060	1065
Leu Val Cys Ser Ser Cys Ser Thr Lys Lys Met Val Val Glu Gly Cys		1070
	1075	1080
Arg Glu Asn Pro Ala Arg Val Cys Asp Gln Cys Tyr Ser Tyr Cys Asn		1085
	1090	1095
Lys Asp Val Pro Glu Glu Pro Ser Glu Lys Pro Glu Ala Leu Asp Ser		1100
1105	1110	1115
Ser Lys Ser Glu Ser Pro Pro Tyr Ser Phe Val Val Arg Val Pro Lys		1120
	1125	1130
Ala Asp Glu Val Glu Trp Ile Leu Asp Leu Lys Glu Glu Glu Asn Glu		1135
	1140	1145
Leu Val Arg Ser Glu Phe Tyr Tyr Glu Gln Ala Pro Ser Ala Ser Leu		1150
	1155	1160
Cys Ile Ala Ile Leu Asn Leu His Arg Asp Ser Ile Ala Cys Gly His		1165
	1170	1175
Gln Leu Ile Glu His Cys Cys Arg Leu Ser Lys Gly Leu Thr Asn Pro		1180
1185	1190	1195
Glu Val Asp Ala Gly Leu Leu Thr Asp Ile Met Lys Gln Leu Leu Phe		1200
	1205	1210
Ser Ala Lys Met Met Phe Val Lys Ala Gly Gln Ser Gln Asp Leu Ala		1215
	1220	1225
Leu Cys Asp Ser Tyr Ile Ser Lys Val Asp Val Leu Asn Ile Leu Val		1230
	1235	1240
Ala Ala Ala Tyr Arg His Val Pro Ser Leu Asp Gln Ile Leu Gln Pro		1245
	1250	1255
Ala Ala Val Thr Arg Leu Arg Asn Gln Leu Leu Glu Ala Glu Tyr Tyr		1260
1265	1270	1275
Gln Leu Gly Val Glu Val Ser Thr Lys Thr Gly Leu Asp Thr Thr Gly		1280
	1285	1290
Ala Trp His Ala Trp Gly Met Ala Cys Leu Lys Ala Gly Asn Leu Thr		1295
	1300	1305
Ala Ala Arg Glu Lys Phe Ser Arg Cys Leu Lys Pro Pro Phe Asp Leu		1310
	1315	1320
Asn Gln Leu Asn His Gly Ser Arg Leu Val Gln Asp Val Val Glu Tyr		1325
	1330	1335
Leu Glu Ser Thr Val Arg Pro Phe Val Ser Leu Gln Asp Asp Asp Tyr		1340
1345	1350	1355
Phe Ala Thr Leu Arg Glu Leu Glu Ala Thr Leu Arg Thr Gln Ser Leu		1360
	1365	1370
Ser Leu Ala Val Ile Pro Glu Gly Lys Ile Met Asn Asn Thr Tyr Tyr		1375
	1380	1385
Gln Glu Cys Leu Phe Tyr Leu His Asn Tyr Ser Thr Asn Leu Ala Ile		1390
	1395	1400
Ile Ser Phe Tyr Val Arg His Ser Cys Leu Arg Glu Ala Leu Leu His		1405
	1410	1415
Leu Leu Asn Lys Glu Ser Pro Pro Glu Val Phe Ile Glu Gly Ile Phe		1420
1425	1430	1435
Gln Pro Ser Tyr Lys Ser Gly Lys Leu His Thr Leu Glu Asn Leu Leu		1440
	1445	1450
Glu Ser Ile Asp Pro Thr Leu Glu Ser Trp Gly Lys Tyr Leu Ile Ala		1455
	1460	1465
Ala Cys Gln His Leu Gln Lys Lys Asn Tyr Tyr His Ile Leu Tyr Glu		1470
	1475	1480
Leu Gln Gln Phe Met Lys Asp Gln Val Arg Ala Ala Met Thr Cys Ile		1485
	1490	1495
Arg Phe Phe Ser His Lys Ala Lys Ser Tyr Thr Glu Leu Gly Glu Lys		1500

1510 1515 1520
 Leu Ser Trp Leu Leu Lys Ala Lys Asp His Leu Lys Ile Tyr Leu Gln
 1525 1530 1535
 Glu Thr Ser Arg Ser Ser Gly Arg Lys Lys Thr Thr Phe Phe Arg Lys
 1540 1545 1550
 Lys Met Thr Ala Ala Asp Val Ser Arg His Met Asn Thr Leu Gln Leu
 1555 1560 1565
 Gln Met Glu Val Thr Arg Phe Leu His Arg Cys Glu Ser Ala Gly Thr
 1570 1575 1580
 Ser Gln Ile Thr Thr Leu Pro Leu Pro Thr Leu Phe Gly Asn Asn His
 1585 1590 1595 1600
 Met Lys Met Asp Val Ala Cys Lys Val Met Leu Gly Gly Lys Asn Val
 1605 1610 1615
 Glu Asp Gly Phe Gly Ile Ala Phe Arg Val Leu Gln Asp Phe Gln Leu
 1620 1625 1630
 Asp Ala Ala Met Thr Tyr Cys Arg Ala Ala Arg Gln Leu Val Glu Lys
 1635 1640 1645
 Glu Lys Tyr Ser Glu Ile Gln Gln Leu Leu Lys Cys Val Ser Glu Ser
 1650 1655 1660
 Gly Met Ala Ala Lys Ser Asp Gly Asp Thr Ile Leu Leu Asn Cys Leu
 1665 1670 1675 1680
 Glu Ala Phe Lys Arg Ile Pro Pro Gln Cys Cys Phe Cys Ser Ala Gln
 1685 1690 1695
 Glu Leu Glu Gly Leu Ile Gln Ala Ile His Asn Asp Asp Asn Lys Val
 1700 1705 1710
 Arg Ala Tyr Leu Ile Cys Cys Lys Leu Arg Ser Ala Tyr Leu Ile Ala
 1715 1720 1725
 Val Lys Gln Glu His Ser Arg Ala Thr Ala Leu Val Gln Gln Val Gln
 1730 1735 1740
 Gln Ala Ala Lys Ser Ser Gly Asp Ala Val Val Gln Asp Ile Cys Ala
 1745 1750 1755 1760
 Gln Trp Leu Leu Thr Ser His Pro Arg Gly Ala His Gly Pro Gly Ser
 1765 1770 1775
 Arg Lys
 1778

<210> 3127
 <211> 264
 <212> PRT
 <213> Homo sapiens

<400> 3127
 His Leu Gly Pro Pro Leu Ala Trp Ile Pro Ala Ala Ser Leu Thr Ser
 1 5 10 15
 Thr Lys Gly Glu Phe Gly Val Glu Asp Asp Arg Pro Ala Arg Gly Pro
 20 25 30
 Pro Pro Pro Lys Ser Glu Glu Ala Ser Trp Ser Glu Ser Gly Val Ser
 35 40 45
 Ser Ser Ser Gly Asp Gly Pro Phe Ala Gly Gly Glu Val Asp Lys Arg
 50 55 60
 Leu His Gln Leu Lys Thr Gln Leu Ala Thr Leu Thr Ser Ser Leu Ala
 65 70 75 80
 Thr Val Thr Gln Glu Lys Ser Arg Met Glu Ala Ser Tyr Leu Ala Asp
 85 90 95
 Lys Lys Lys Met Lys Gln Asp Leu Glu Asp Ala Ser Asn Lys Ala Glu
 100 105 110
 Glu Glu Arg Ala Arg Leu Glu Gly Glu Leu Lys Gly Leu Gln Glu Gln
 115 120 125
 Ile Ala Glu Thr Lys Ala Arg Leu Ile Thr Gln Gln His Asp Arg Ala
 130 135 140
 Gln Glu Gln Ser Asp His Ala Leu Met Leu Arg Glu Leu Gln Lys Leu

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145          150          155          160
Leu Gln Glu Glu Arg Thr Gln Arg Gln Asp Leu Glu Leu Arg Leu Glu
          165          170          175
Glu Thr Arg Glu Ala Leu Ala Gly Arg Ala Tyr Ala Ala Glu Gln Met
          180          185          190
Glu Gly Phe Glu Leu Gln Thr Lys Gln Leu Thr Arg Glu Val Glu Glu
          195          200          205
Leu Lys Ser Glu Leu Gln Ala Ile Arg Asp Glu Lys Asn Gln Pro Asp
          210          215          220
Pro Arg Leu Gln Glu Leu Gln Glu Glu Ala Ala Arg Leu Lys Ser His
225          230          235          240
Phe Gln Ala Gln Leu Gln Gln Glu Met Arg Lys Val Ile Ile His Ile
          245          250          255
Ser Phe Lys His Gln Pro Leu Thr
          260          264

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<210> 3128
<211> 351
<212> PRT
<213> Homo sapiens

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          <400> 3128
Ala Ser Gly Ser Pro Ala Pro Ser Ser Ser Ser Ala Met Ala Ala Ala
  1          5          10          15
Cys Gly Pro Gly Ala Ala Gly Tyr Cys Leu Leu Leu Gly Leu His Leu
          20          25          30
Phe Leu Leu Thr Ala Gly Pro Ala Leu Gly Trp Asn Asp Pro Asp Arg
          35          40          45
Met Leu Leu Arg Asp Val Lys Ala Leu Thr Leu His Tyr Asp Arg Tyr
          50          55          60
Thr Thr Ser Arg Arg Leu Asp Pro Ile Pro Gln Leu Lys Cys Val Gly
          65          70          75          80
Gly Thr Ala Gly Cys Asp Ser Tyr Thr Pro Lys Val Ile Gln Cys Gln
          85          90          95
Asn Lys Gly Trp Asp Gly Tyr Asp Val Gln Trp Glu Cys Lys Thr Asp
          100          105          110
Leu Asp Ile Ala Tyr Lys Phe Gly Lys Thr Val Val Ser Cys Glu Gly
          115          120          125
Tyr Glu Ser Ser Glu Asp Gln Tyr Val Leu Arg Gly Ser Cys Gly Leu
          130          135          140
Glu Tyr Asn Leu Asp Tyr Thr Glu Leu Gly Leu Gln Lys Leu Lys Glu
145          150          155          160
Ser Gly Lys Gln His Gly Phe Ala Ser Phe Ser Asp Tyr Tyr Tyr Lys
          165          170          175
Trp Ser Ser Ala Asp Ser Cys Asn Met Ser Gly Leu Ile Thr Ile Val
          180          185          190
Val Leu Leu Gly Ile Ala Phe Val Val Tyr Lys Leu Phe Leu Ser Asp
          195          200          205
Gly Gln Tyr Ser Pro Pro Pro Tyr Ser Glu Tyr Pro Pro Phe Ser His
          210          215          220
Arg Tyr Gln Arg Phe Thr Asn Ser Ala Gly Pro Pro Pro Pro Gly Phe
225          230          235          240
Lys Ser Glu Phe Thr Gly Pro Gln Asn Thr Gly His Gly Ala Thr Ser
          245          250          255
Gly Phe Gly Ser Ala Phe Thr Gly Gln Gln Gly Tyr Glu Asn Ser Gly
          260          265          270
Pro Gly Phe Trp Thr Gly Leu Gly Thr Gly Gly Ile Leu Gly Tyr Leu
          275          280          285
Phe Gly Ser Asn Arg Ala Ala Thr Pro Phe Ser Asp Ser Trp Tyr Tyr
          290          295          300
Pro Ser Tyr Pro Pro Ser Tyr Pro Gly Thr Trp Asn Arg Ala Tyr Ser

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305					310					315				320
Pro	Leu	His	Gly	Gly	Ser	Gly	Ser	Tyr	Ser	Val	Cys	Ser	Asn	Ser
				325					330					335
Thr	Lys	Thr	Arg	Thr	Ala	Ser	Gly	Tyr	Gly	Gly	Thr	Arg	Arg	Arg
			340					345					350	351

<210> 3129
 <211> 383
 <212> PRT
 <213> Homo sapiens

<400> 3129

Glu	Leu	Ala	Arg	Arg	Pro	Lys	Gln	Gln	Ser	Ser	Glu	Lys	Ser	Arg	Asn
1				5					10					15	
Met	Ile	Arg	Asn	Trp	Leu	Thr	Ile	Phe	Ile	Leu	Phe	Pro	Leu	Lys	Leu
			20					25					30		
Val	Glu	Lys	Cys	Glu	Ser	Ser	Val	Ser	Leu	Thr	Val	Pro	Pro	Val	Val
		35					40					45			
Lys	Leu	Glu	Asn	Gly	Ser	Ser	Thr	Asn	Val	Ser	Leu	Thr	Leu	Arg	Pro
	50					55					60				
Pro	Leu	Asn	Ala	Thr	Leu	Val	Ile	Thr	Phe	Glu	Ile	Thr	Phe	Arg	Ser
	65				70					75				80	
Lys	Asn	Ile	Thr	Ile	Leu	Glu	Leu	Pro	Asp	Glu	Val	Val	Val	Pro	Pro
				85					90					95	
Gly	Val	Thr	Asn	Ser	Ser	Phe	Gln	Val	Thr	Ser	Gln	Asn	Val	Gly	Gln
			100					105					110		
Leu	Thr	Val	Tyr	Leu	His	Gly	Asn	His	Ser	Asn	Gln	Thr	Gly	Pro	Arg
	115					120						125			
Ile	Arg	Phe	Leu	Val	Ile	Arg	Ser	Ser	Ala	Ile	Ser	Ile	Ile	Asn	Gln
	130					135					140				
Val	Ile	Gly	Trp	Ile	Tyr	Phe	Val	Ala	Trp	Ser	Ile	Ser	Phe	Tyr	Pro
	145				150					155				160	
Gln	Val	Ile	Met	Asn	Trp	Arg	Arg	Lys	Ser	Val	Ile	Gly	Leu	Ser	Phe
			165					170					175		
Asp	Phe	Val	Ala	Leu	Asn	Leu	Thr	Gly	Phe	Val	Ala	Tyr	Ser	Val	Phe
		180						185					190		
Asn	Ile	Gly	Leu	Leu	Trp	Val	Pro	Tyr	Ile	Lys	Glu	Gln	Phe	Leu	Leu
	195					200						205			
Lys	Tyr	Pro	Asn	Gly	Val	Asn	Pro	Val	Asn	Ser	Asn	Asp	Val	Phe	Phe
	210					215					220				
Ser	Leu	His	Ala	Val	Val	Leu	Thr	Leu	Ile	Ile	Ile	Val	Gln	Cys	Cys
	225				230					235				240	
Leu	Tyr	Glu	Arg	Gly	Gly	Gln	Arg	Val	Ser	Trp	Pro	Ala	Ile	Gly	Phe
				245					250					255	
Leu	Val	Leu	Ala	Trp	Leu	Phe	Ala	Phe	Val	Thr	Met	Ile	Val	Ala	Ala
		260						265					270		
Val	Gly	Val	Ile	Thr	Trp	Leu	Gln	Phe	Leu	Phe	Cys	Phe	Ser	Tyr	Ile
	275					280						285			
Lys	Leu	Ala	Val	Thr	Leu	Val	Lys	Tyr	Phe	Pro	Gln	Ala	Tyr	Met	Asn
	290					295					300				
Phe	Tyr	Tyr	Lys	Ser	Thr	Glu	Gly	Trp	Ser	Ile	Gly	Asn	Val	Leu	Leu
	305				310					315				320	
Asp	Phe	Thr	Gly	Gly	Ser	Phe	Ser	Leu	Leu	Gln	Met	Phe	Leu	Gln	Ser
				325					330					335	
Tyr	Asn	Asn	Asp	Gln	Trp	Thr	Leu	Ile	Phe	Gly	Asp	Pro	Thr	Lys	Phe
			340				345						350		
Gly	Leu	Gly	Val	Phe	Ser	Ile	Val	Phe	Asp	Val	Val	Phe	Phe	Ile	Gln
		355					360					365			
His	Phe	Cys	Leu	Tyr	Arg	Lys	Arg	Pro	Gly	Tyr	Asp	Gln	Leu	Asn	
	370					375					380			383	

<210> 3130
 <211> 665
 <212> PRT
 <213> Homo sapiens

<400> 3130
 Cys Trp Trp Pro Pro Leu Leu Pro Gln Leu Glu Pro Glu Pro Pro Pro
 1 5 10 15
 Leu Arg Pro Arg Val Ala Ala Ser Gln Gly Gly Gly Met Leu Gly Lys
 20 25 30
 Gly Val Val Gly Gly Gly Gly Thr Lys Ala Pro Lys Pro Ser Phe
 35 40 45
 Val Ser Tyr Val Arg Pro Glu Glu Ile His Thr Asn Glu Lys Glu Val
 50 55 60
 Thr Glu Lys Glu Val Thr Leu His Leu Leu Pro Gly Glu Gln Leu Leu
 65 70 75 80
 Cys Glu Ala Ser Thr Val Leu Lys Tyr Val Gln Glu Asp Ser Cys Gln
 85 90 95
 His Gly Val Tyr Gly Arg Leu Val Cys Thr Asp Phe Lys Ile Ala Phe
 100 105 110
 Leu Gly Asp Asp Glu Ser Ala Leu Asp Asn Asp Glu Thr Gln Phe Lys
 115 120 125
 Asn Lys Val Ile Gly Glu Asn Asp Ile Thr Leu His Cys Val Asp Gln
 130 135 140
 Ile Tyr Gly Val Phe Asp Glu Lys Lys Lys Thr Leu Phe Gly Gln Leu
 145 150 155 160
 Lys Lys Tyr Pro Glu Lys Leu Ile Ile His Cys Lys Asp Leu Arg Val
 165 170 175
 Phe Gln Phe Cys Leu Arg Tyr Thr Lys Glu Glu Glu Val Lys Arg Ile
 180 185 190
 Val Ser Gly Ile Ile His His Thr Gln Ala Pro Lys Leu Leu Lys Arg
 195 200 205
 Leu Phe Leu Phe Ser Tyr Ala Thr Ala Ala Gln Asn Asn Thr Val Thr
 210 215 220
 Asp Pro Lys Asn His Thr Val Met Phe Asp Thr Leu Lys Asp Trp Cys
 225 230 235 240
 Trp Glu Leu Glu Arg Thr Lys Gly Asn Met Lys Tyr Lys Ala Val Ser
 245 250 255
 Val Asn Glu Gly Tyr Lys Val Cys Glu Arg Leu Pro Ala Tyr Phe Val
 260 265 270
 Val Pro Thr Pro Leu Pro Glu Glu Asn Val Gln Arg Phe Gln Gly His
 275 280 285
 Gly Ile Pro Ile Trp Cys Trp Ser Cys His Asn Gly Ser Ala Leu Leu
 290 295 300
 Lys Met Ser Ala Leu Pro Lys Glu Gln Asp Asp Gly Ile Leu Gln Ile
 305 310 315 320
 Gln Lys Ser Phe Leu Asp Gly Ile Tyr Lys Thr Ile His Arg Pro Pro
 325 330 335
 Tyr Glu Ile Val Lys Thr Glu Asp Leu Ser Ser Asn Phe Leu Ser Leu
 340 345 350
 Gln Glu Ile Gln Thr Ala Tyr Ser Lys Phe Lys Gln Leu Phe Leu Ile
 355 360 365
 Asp Asn Ser Thr Glu Phe Trp Asp Thr Asp Ile Lys Trp Phe Ser Leu
 370 375 380
 Leu Glu Ser Ser Ser Trp Leu Asp Ile Ile Arg Arg Cys Leu Lys Lys
 385 390 395 400
 Ala Ile Glu Ile Thr Glu Cys Met Glu Ala Gln Asn Met Asn Val Leu
 405 410 415
 Leu Leu Glu Glu Asn Ala Ser Asp Leu Cys Cys Leu Ile Ser Ser Leu
 420 425 430
 Val Gln Leu Met Met Asp Pro His Cys Arg Thr Arg Ile Gly Phe Gln

435	440	445
Ser Leu Ile Gln Lys Glu Trp Val Met Gly Gly His Cys Phe Leu Asp		
450	455	460
Arg Cys Asn His Leu Arg Gln Asn Asp Lys Glu Glu His Gln Arg Gln		
465	470	475
Leu Ser Leu Pro Leu Thr Gln Ser Lys Ser Ser Pro Lys Arg Gly Phe		480
	485	490
Phe Arg Glu Glu Thr Asp His Leu Ile Lys Asn Leu Leu Gly Lys Arg		495
	500	505
Ile Ser Lys Leu Ile Asn Ser Ser Asp Glu Leu Gln Asp Asn Phe Arg		510
	515	520
Glu Phe Tyr Asp Ser Trp His Ser Lys Ser Thr Asp Tyr His Gly Leu		525
	530	535
Leu Leu Pro His Ile Glu Gly Pro Glu Ile Lys Val Trp Ala Gln Arg		540
545	550	555
Tyr Leu Arg Trp Ile Pro Glu Ala Gln Ile Leu Gly Gly Gly Gln Val		560
	565	570
Ala Thr Leu Ser Lys Leu Leu Glu Met Met Glu Glu Val Gln Ser Leu		575
	580	585
Gln Glu Lys Ile Asp Glu Arg His His Ser Gln Gln Ala Pro Gln Ala		590
	595	600
Glu Ala Pro Cys Leu Leu Arg Asn Ser Ala Arg Leu Ser Ser Leu Phe		605
	610	615
Pro Phe Ala Leu Leu Gln Arg His Ser Ser Lys Pro Val Leu Pro Thr		620
625	630	635
Ser Gly Trp Lys Ala Leu Gly Asp Glu Asp Asp Leu Ala Lys Arg Glu		640
	645	650
Asp Glu Phe Val Asp Leu Gly Asp Val		655
	660	665

<210> 3131

<211> 279

<212> PRT

<213> Homo sapiens

<400> 3131

Gln Ser Arg Ser Arg Pro Arg Arg Glu Gly Val Gly Thr Gly Ser Arg		
1	5	10
Ala Val Leu Cys Ile Leu Ala Thr Cys Gly Ser Lys Met Ser Asp Ile		15
	20	25
Gly Asp Trp Phe Arg Ser Ile Pro Ala Ile Thr Arg Tyr Trp Phe Ala		30
	35	40
Ala Thr Val Ala Val Pro Leu Val Gly Lys Leu Gly Leu Ile Ser Pro		45
	50	55
Ala Tyr Leu Phe Leu Trp Pro Glu Ala Phe Leu Tyr Arg Phe Gln Ile		60
65	70	75
Trp Arg Pro Ile Thr Ala Thr Phe Tyr Phe Pro Val Gly Pro Gly Thr		80
	85	90
Gly Phe Leu Tyr Leu Val Asn Leu Tyr Phe Leu Tyr Gln Tyr Ser Thr		95
	100	105
Arg Leu Glu Thr Gly Ala Phe Asp Gly Arg Pro Ala Asp Tyr Leu Phe		110
	115	120
Met Leu Leu Phe Asn Trp Ile Cys Ile Val Ile Thr Gly Leu Ala Met		125
	130	135
Asp Met Gln Leu Leu Met Ile Pro Leu Ile Met Ser Val Leu Tyr Val		140
145	150	155
Trp Ala Gln Leu Asn Arg Asp Met Ile Val Ser Phe Trp Phe Gly Thr		160
	165	170
Arg Phe Lys Ala Cys Tyr Leu Pro Trp Val Ile Leu Gly Phe Asn Tyr		175
	180	185
Ile Ile Gly Gly Ser Val Ile Asn Glu Leu Ile Gly Asn Leu Val Gly		190

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<210> 3132
<211> 116
<212> PRT
<213> Homo sapiens
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<210> 3133
<211> 973
<212> PRT
<213> Homo sapiens
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4813

130						135						140					
Phe	Ser	Lys	Thr	Tyr	Thr	Ser	Phe	Pro	Lys	Ser	Cys	Asp	Asn	Phe	Asn		
145						150					155				160		
Leu	Leu	His	Pro	Ile	Phe	Gln	Arg	His	Ala	His	Glu	Gln	Asp	Thr	Lys		
				165					170					175			
Met	His	Glu	Ile	Tyr	Lys	Gly	Asn	Ile	Thr	Pro	Gln	Leu	Asn	Lys	Asn		
			180						185					190			
Thr	Leu	Lys	Thr	Ser	Ala	Ala	Thr	Asp	Val	Trp	Ala	Val	Tyr	Phe	Ser		
		195					200					205					
Gln	Phe	Trp	Ile	Asp	Tyr	Glu	Gly	Met	Lys	Ser	Gly	Lys	Gly	Arg	Pro		
210						215					220						
Ile	Ser	Phe	Val	Asp	Ser	Phe	Pro	Leu	Ser	Ile	Trp	Ile	Cys	Gln	Pro		
225					230					235				240			
Thr	Arg	Tyr	Ala	Glu	Ser	Gln	Lys	Glu	Pro	Gln	Thr	Cys	Asn	Gln	Val		
				245					250					255			
Ser	Leu	Asn	Thr	Ser	Gln	Ser	Glu	Ser	Ser	Asp	Leu	Ala	Gly	Arg	Leu		
		260					265						270				
Lys	Arg	Lys	Lys	Leu	Leu	Lys	Glu	Tyr	Tyr	Ser	Thr	Glu	Ser	Glu	Pro		
		275					280					285					
Leu	Thr	Asn	Gly	Gly	Gln	Lys	Pro	Ser	Ser	Ser	Asp	Thr	Phe	Phe	Arg		
290					295						300						
Phe	Ser	Pro	Ser	Ser	Ser	Glu	Ala	Asp	Ile	His	Leu	Leu	Val	His	Val		
305					310					315				320			
His	Lys	His	Val	Ser	Met	Gln	Ile	Asn	His	Tyr	Gln	Tyr	Leu	Leu	Leu		
				325				330						335			
Leu	Phe	Leu	His	Glu	Ser	Leu	Ile	Leu	Leu	Ser	Glu	Asn	Leu	Arg	Lys		
		340					345					350					
Asp	Val	Glu	Ala	Val	Thr	Gly	Ser	Pro	Ala	Ser	Gln	Thr	Ser	Ile	Cys		
		355					360					365					
Ile	Gly	Ile	Leu	Leu	Arg	Ser	Ala	Glu	Leu	Ala	Leu	Leu	Leu	His	Pro		
370					375						380						
Val	Asp	Gln	Ala	Asn	Thr	Leu	Lys	Ser	Pro	Val	Ser	Glu	Ser	Val	Ser		
385					390					395				400			
Pro	Val	Val	Pro	Asp	Tyr	Leu	Pro	Thr	Glu	Asn	Gly	Asp	Phe	Leu	Ser		
				405				410						415			
Ser	Lys	Arg	Lys	Gln	Ile	Ser	Arg	Asp	Ile	Asn	Arg	Ile	Arg	Ser	Val		
		420					425					430					
Thr	Val	Asn	His	Met	Ser	Asp	Asn	Arg	Ser	Met	Ser	Val	Asp	Leu	Ser		
		435				440					445						
His	Ile	Pro	Leu	Lys	Asp	Pro	Leu	Leu	Phe	Lys	Ser	Ala	Ser	Asp	Thr		
450					455					460							
Asn	Leu	Gln	Lys	Gly	Ile	Ser	Phe	Met	Asp	Tyr	Leu	Ser	Asp	Lys	His		
465					470					475				480			
Leu	Gly	Lys	Ile	Ser	Glu	Asp	Glu	Ser	Ser	Gly	Leu	Val	Tyr	Lys	Ser		
				485			490							495			
Gly	Ser	Gly	Glu	Ile	Gly	Ser	Glu	Thr	Ser	Asp	Lys	Lys	Asp	Ser	Phe		
		500					505					510					
Tyr	Thr	Asp	Ser	Ser	Ser	Val	Leu	Asn	Tyr	Arg	Glu	Asp	Ser	Asn	Ile		
		515					520					525					
Leu	Ser	Phe	Asp	Ser	Asp	Gly	Asn	Gln	Asn	Ile	Leu	Ser	Ser	Thr	Leu		
530					535						540						
Thr	Ser	Lys	Gly	Asn	Glu	Thr	Ile	Glu	Ser	Ile	Phe	Lys	Ala	Glu	Asp		
545					550					555				560			
Leu	Leu	Pro	Glu	Ala	Ala	Ser	Leu	Ser	Glu	Asn	Leu	Asp	Ile	Ser	Lys		
				565				570						575			
Glu	Glu	Thr	Pro	Pro	Val	Arg	Thr	Leu	Lys	Ser	Gln	Ser	Ser	Leu	Ser		
			580				585							590			
Gly	Lys	Pro	Lys	Glu	Arg	Cys	Pro	Pro	Asn	Leu	Ala	Pro	Leu	Cys	Val		
		595				600					605						
Ser	Tyr	Lys	Asn	Met	Lys	Arg	Ser	Ser	Ser	Gln	Met	Ser	Leu	Asp	Thr		
610					615					620							
Ile	Ser	Leu	Asp	Ser	Met	Ile	Leu	Glu	Glu	Gln	Leu	Leu	Glu	Ser	Asp		
625					630					635				640			
Gly	Ser	Asp	Ser	His	Met	Phe	Leu	Glu	Lys	Gly	Asn	Lys	Lys	Asn	Ser		

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<210> 3134
<211> 523
<212> PRT
<213> Homo sapiens
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4815

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<210> 3135
<211> 369
<212> PRT
<213> Homo sapiens
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4816

1	5	10	15
Ala Ala Pro Thr	Ala Thr Val Ser	Glu Lys Glu Pro	Phe Gly Lys Leu
20	25	30	
Gln Leu Ser Ser	Arg Asp Pro Pro	Gly Ser Leu Ser	Ala Lys Lys Val
35	40	45	
Arg Thr Glu Glu	Lys Lys Ala Pro	Arg Arg Val Asn	Gly Glu Gly Gly
50	55	60	
Ser Gly Gly Asn	Ser Arg Gln Leu	Gln Pro Pro Ala	Ala Pro Ser Pro
65	70	75	80
Gln Ser Tyr Gly	Ser Pro Ala Ser	Trp Ser Phe Ala	Pro Leu Ser Ala
85	90	95	
Ala Pro Ser Pro	Ser Ser Ser Arg	Ser Ser Phe Ser	Phe Ser Ala Gly
100	105	110	
Thr Ala Val Pro	Ser Ser Ala Ser	Ala Ser Leu Ser	Gln Pro Gly Pro
115	120	125	
Arg Lys Leu Leu	Val Pro Pro Thr	Leu Leu His Ala	Gln Pro His His
130	135	140	
Leu Leu Leu Pro	Ala Ala Ala Ala	Ala Ala Ser Ala	Asn Ala Lys Ser
145	150	155	160
Arg Arg Pro Lys	Glu Lys Arg Glu	Lys Glu Arg Arg	Arg His Gly Leu
165	170	175	
Gly Gly Ala Arg	Glu Ala Gly Gly	Ala Ser Arg Glu	Glu Asn Gly Glu
180	185	190	
Val Lys Pro Leu	Pro Arg Asp Lys	Ile Lys Asp Lys	Ile Lys Glu Arg
195	200	205	
Asp Lys Glu Lys	Glu Arg Glu Lys	Lys Lys His Lys	Val Met Asn Glu
210	215	220	
Ile Lys Lys Glu	Asn Gly Glu Val	Lys Ile Leu Leu	Lys Ser Gly Lys
225	230	235	240
Glu Lys Pro Lys	Thr Asn Ile Glu	Asp Leu Gln Ile	Lys Lys Val Lys
245	250	255	
Lys Lys Lys Lys	Lys Lys His Lys	Glu Asn Glu Lys	Arg Lys Arg Pro
260	265	270	
Lys Met Tyr Ser	Lys Ser Ile Gln	Thr Ile Cys Ser	Gly Leu Leu Thr
275	280	285	
Asp Val Glu Asp	Gln Ala Ala Lys	Gly Ile Leu Asn	Asp Asn Ile Lys
290	295	300	
Asp Tyr Val Gly	Lys Asn Leu Asp	Thr Lys Asn Tyr	Asp Ser Lys Ile
305	310	315	320
Pro Glu Asn Ser	Glu Phe Pro Phe	Val Ser Leu Lys	Glu Pro Arg Val
325	330	335	
Gln Asn Asn Leu	Lys Arg Leu Asp	Thr Leu Glu Phe	Lys Gln Leu Ile
340	345	350	
His Ile Glu His	Gln Pro Asn Gly	Gly Ala Ser Val	Ile His Cys Leu
355	360	365	
Gln			
369			

<210> 3136
 <211> 253
 <212> PRT
 <213> Homo sapiens

<400> 3136

Thr Ala Ala Met	Ser Ile Phe Thr	Pro Thr Asn Gln	Ile Arg Leu Thr
1	5	10	15
Asn Val Ala Val	Val Arg Met Lys	Arg Ala Gly Lys	Arg Phe Glu Ile
20	25	30	
Ala Cys Tyr Lys	Asn Lys Val Val	Gly Trp Arg Ser	Gly Val Glu Lys
35	40	45	
Asp Leu Asp Glu	Val Leu Gln Thr	His Ser Val Phe	Val Asn Val Ser

50	55	60																	
Lys Gly Gln Val Ala	Lys Lys Glu Asp Leu Ile Ser Ala Phe Gly Thr																		
65	70	75	80																
Asp Asp Gln Thr Glu	Ile Cys Lys Gln Ile Leu Thr Lys Gly Glu Val																		
85	90	95																	
Gln Val Ser Asp Lys	Glu Arg His Thr Gln Leu Glu Gln Met Phe Arg																		
100	105	110																	
Asp Ile Ala Thr Ile	Val Ala Asp Lys Cys Val Asn Pro Glu Thr Lys																		
115	120	125																	
Arg Pro Tyr Thr Val	Ile Leu Ile Glu Arg Ala Met Lys Asp Ile His																		
130	135	140																	
Tyr Ser Val Lys Thr	Asn Lys Ser Thr Lys Gln Gln Ala Leu Glu Val																		
145	150	155	160																
Ile Lys Gln Leu Lys	Glu Lys Met Lys Ile Glu Arg Ala His Met Arg																		
165	170	175																	
Leu Arg Phe Ile Leu	Pro Val Asn Glu Gly Lys Lys Leu Lys Glu Lys																		
180	185	190																	
Leu Lys Pro Leu Ile	Lys Val Ile Glu Ser Glu Asp Tyr Gly Gln Gln																		
195	200	205																	
Leu Glu Ile Val Cys	Leu Ile Asp Pro Gly Cys Phe Arg Glu Ile Asp																		
210	215	220																	
Glu Leu Ile Lys Lys	Glu Thr Lys Gly Lys Gly Ser Leu Glu Val Leu																		
225	230	235	240																
Asn Leu Lys Asp Val	Glu Glu Gly Asp Glu Lys Phe Glu																		
245	250	253																	

<210> 3137
 <211> 1047
 <212> PRT
 <213> Homo sapiens

<400> 3137

Met Val Glu Gly	Lys Arg His Val Leu His Gly Gly Arg Gln Glu Arg																		
1	5	10	15																
Met Arg Ala Lys	Gln Lys Gly Lys Pro Leu Ile Lys Ser Ser Asp Leu																		
20	25	30																	
Val Arg Leu Ile	His Tyr His His Asn Ser Ser Pro Leu His Lys Gln																		
35	40	45																	
Ser Ser Gly Pro	Ser Ser Ser Pro Ala Ala Ala Ala Pro Glu Lys																		
50	55	60																	
Pro Gly Pro Lys	Ala Ala Glu Val Gly Asp Asp Phe Leu Gly Asp Phe																		
65	70	75	80																
Val Val Gly Glu	Arg Val Trp Val Asn Gly Val Lys Pro Gly Val Val																		
85	90	95																	
Gln Tyr Leu Gly	Glu Thr Gln Phe Ala Pro Gly Gln Trp Ala Gly Val																		
100	105	110																	
Val Leu Asp Asp	Pro Val Gly Lys Asn Asp Gly Ala Val Gly Gly Val																		
115	120	125																	
Arg Tyr Phe Glu	Cys Pro Ala Leu Gln Gly Ile Phe Thr Arg Pro Ser																		
130	135	140																	
Lys Leu Thr Arg	Gln Pro Thr Ala Glu Gly Ser Gly Ser Asp Ala His																		
145	150	155	160																
Ser Val Glu Ser	Leu Thr Ala Gln Asn Leu Ser Leu His Ser Gly Thr																		
165	170	175																	
Ala Thr Pro Pro	Leu Thr Ser Arg Val Ile Pro Leu Arg Glu Ser Val																		
180	185	190																	
Leu Asn Ser Ser	Val Lys Thr Gly Asn Glu Ser Gly Ser Asn Leu Ser																		
195	200	205																	
Asp Ser Gly Ser	Val Lys Arg Gly Glu Lys Asp Leu Arg Leu Gly Asp																		
210	215	220																	
Arg Val Leu Val	Gly Gly Thr Lys Thr Gly Val Val Arg Tyr Val Gly																		

225					230					235				240
Glu Thr Asp Phe	Ala Lys Gly Glu Trp Cys Gly Val Glu Leu Asp Glu													
	245				250								255	
Pro Leu Gly Lys Asn Asp Gly Ala Val Ala Gly Thr Arg Tyr Phe Gln														
	260				265								270	
Cys Pro Pro Lys Phe Gly Leu Phe Ala Pro Ile His Lys Val Ile Arg														
	275				280								285	
Ile Gly Phe Pro Ser Thr Ser Pro Ala Lys Ala Lys Lys Thr Lys Arg														
	290				295								300	
Met Ala Met Gly Val Ser Ala Leu Thr His Ser Pro Ser Ser Ser Ser														
305				310					315					320
Ile Ser Ser Val Ser Ser Val Ala Ser Ser Val Gly Gly Arg Pro Ser														
	325								330					335
Arg Ser Gly Leu Thr Glu Thr Ser Ser Arg Tyr Ala Arg Lys Ile														
	340								345				350	
Ser Gly Thr Thr Ala Leu Gln Glu Ala Leu Lys Glu Lys Gln Gln His														
	355				360								365	
Ile Glu Gln Leu Leu Ala Glu Arg Asp Leu Glu Arg Ala Glu Val Ala														
	370				375								380	
Lys Ala Thr Ser His Ile Cys Glu Val Glu Lys Glu Ile Ala Leu Leu														
385				390					395					400
Lys Ala Gln His Glu Gln Tyr Val Ala Glu Ala Glu Glu Lys Leu Gln														
	405								410					415
Arg Ala Arg Leu Leu Val Glu Ser Val Arg Lys Glu Lys Val Asp Leu														
	420								425				430	
Ser Asn Gln Leu Glu Glu Glu Arg Arg Lys Val Glu Asp Leu Gln Phe														
	435								440				445	
Arg Val Glu Glu Glu Ser Ile Thr Lys Gly Asp Leu Glu Thr Gln Thr														
	450				455								460	
Gln Leu Glu His Ala Arg Ile Gly Glu Leu Glu Gln Ser Leu Leu Leu														
465				470					475					480
Glu Lys Ala Gln Ala Glu Arg Leu Leu Arg Glu Leu Ala Asp Asn Arg														
	485								490					495
Leu Thr Thr Val Ala Glu Lys Ser Arg Val Leu Gln Leu Glu Glu Glu														
	500								505				510	
Leu Thr Leu Arg Arg Gly Glu Ile Glu Glu Leu Gln Gln Cys Leu Leu														
	515								520				525	
His Ser Gly Pro Pro Pro Pro Asp His Pro Asp Ala Ala Glu Ile Leu														
	530								535				540	
Arg Leu Arg Glu Arg Leu Leu Ser Ala Ser Lys Glu His Gln Arg Glu														
545				550					555					560
Ser Gly Val Leu Arg Asp Lys Tyr Glu Lys Ala Leu Lys Ala Tyr Gln														
	565								570					575
Ala Glu Val Asp Lys Leu Arg Ala Ala Asn Glu Lys Tyr Ala Gln Glu														
	580								585					590
Val Ala Gly Leu Lys Asp Lys Val Gln Gln Ala Thr Ser Glu Asn Met														
	595								600					605
Gly Leu Met Asp Asn Trp Lys Ser Lys Leu Asp Ser Leu Ala Ser Asp														
	610								615					620
His Gln Lys Ser Leu Glu Asp Leu Lys Ala Thr Leu Asn Ser Gly Pro														
625				630					635					640
Gly Ala Gln Gln Lys Glu Ile Gly Glu Leu Lys Ala Val Met Glu Gly														
	645								650					655
Ile Lys Met Glu His Gln Leu Glu Leu Gly Asn Leu Gln Ala Lys His														
	660								665					670
Asp Leu Glu Thr Ala Met His Val Lys Glu Lys Glu Ala Leu Arg Glu														
	675								680					685
Lys Leu Gln Glu Ala Gln Glu Glu Leu Ala Gly Leu Gln Arg His Trp														
	690								695					700
Arg Ala Gln Leu Glu Val Gln Ala Ser Gln His Arg Leu Glu Leu Gln														
705				710					715					720
Glu Ala Gln Asp Gln Arg Arg Asp Ala Glu Leu Arg Val His Glu Leu														
	725								730					735
Glu Lys Leu Asp Val Glu Tyr Arg Gly Gln Ala Gln Ala Ile Glu Phe														

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<210> 3138
<211> 796
<212> PRT
<213> Homo sapiens
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4820

115	120	125
Leu Val Leu Ala Gly Ile Pro His Gly Met Arg Pro Gln Leu Trp Met		
130	135	140
Arg Leu Ser Gly Ala Leu Gln Lys Lys Arg Asn Ser Glu Leu Ser Tyr		
145	150	155
Arg Glu Ile Val Lys Asn Ser Ser Asn Asp Glu Thr Ile Ala Ala Lys		160
165	170	175
Gln Ile Glu Lys Asp Leu Leu Arg Thr Met Pro Ser Asn Ala Cys Phe		
180	185	190
Ala Ser Met Gly Ser Ile Gly Val Pro Arg Leu Arg Arg Val Leu Arg		
195	200	205
Ala Leu Ala Trp Leu Tyr Pro Glu Ile Gly Tyr Cys Gln Gly Thr Gly		
210	215	220
Met Val Ala Ala Cys Leu Leu Phe Leu Glu Glu Asp Ala Phe		
225	230	235
Trp Met Met Ser Ala Ile Ile Glu Asp Leu Leu Pro Ala Ser Tyr Phe		240
245	250	255
Ser Thr Thr Leu Leu Gly Val Gln Thr Asp Gln Arg Val Leu Arg His		
260	265	270
Leu Ile Val Gln Tyr Leu Pro Arg Leu Asp Lys Leu Leu Gln Glu His		
275	280	285
Asp Ile Glu Leu Ser Leu Ile Thr Leu His Trp Phe Leu Thr Ala Phe		
290	295	300
Ala Ser Val Val Asp Ile Lys Leu Leu Leu Arg Ile Trp Asp Leu Phe		
305	310	315
Phe Tyr Glu Gly Ser Arg Val Leu Phe Gln Leu Thr Leu Gly Met Leu		320
325	330	335
His Leu Lys Glu Glu Leu Ile Gln Ser Glu Asn Ser Ala Ser Ile		
340	345	350
Phe Asn Thr Leu Ser Asp Ile Pro Ser Gln Met Glu Asp Ala Glu Leu		
355	360	365
Leu Leu Gly Val Ala Met Arg Leu Ala Gly Ser Leu Thr Asp Val Ala		
370	375	380
Val Glu Thr Gln Arg Arg Lys His Leu Ala Tyr Leu Ile Ala Asp Gln		
385	390	395
Gly Gln Leu Leu Gly Ala Gly Thr Leu Thr Asn Leu Ser Gln Val Val		400
405	410	415
Arg Arg Arg Thr Gln Arg Arg Lys Ser Thr Ile Thr Ala Leu Leu Phe		
420	425	430
Gly Glu Asp Asp Leu Glu Ala Leu Lys Ala Lys Asn Ile Lys Gln Thr		
435	440	445
Glu Leu Val Ala Asp Leu Arg Glu Ala Ile Leu Arg Val Ala Arg His		
450	455	460
Phe Gln Cys Thr Asp Pro Lys Asn Cys Ser Val Val Ser Arg Gln Leu		
465	470	475
Pro Gly Leu Leu Pro Asn Thr Ala Leu Thr Pro Pro Thr Pro Leu Val		480
485	490	495
Gly Leu Cys Ser Leu Trp Gln Glu Leu Thr Pro Asp Tyr Ser Met Glu		
500	505	510
Ser His Gln Arg Asp His Glu Asn Tyr Val Ala Cys Ser Arg Ser His		
515	520	525
Arg Arg Arg Ala Lys Ala Leu Leu Asp Phe Glu Arg His Asp Asp Asp		
530	535	540
Glu Leu Gly Phe Arg Lys Asn Asp Ile Ile Thr Ile Val Ser Gln Lys		
545	550	555
Asp Glu His Cys Trp Val Gly Glu Leu Asn Gly Leu Arg Gly Trp Phe		560
565	570	575
Pro Ala Lys Phe Val Glu Val Leu Asp Glu Arg Ser Lys Glu Tyr Ser		
580	585	590
Ile Ala Gly Asp Asp Ser Val Thr Glu Gly Val Thr Asp Leu Val Arg		
595	600	605
Gly Thr Leu Cys Pro Ala Leu Lys Ala Leu Phe Glu His Gly Leu Lys		
610	615	620
Lys Pro Ser Leu Leu Gly Gly Ala Cys His Pro Trp Leu Phe Ile Glu		

625					630					635				640
Glu	Ala	Ala	Gly	Arg	Glu	Val	Glu	Arg	Asp	Phe	Ala	Ser	Val	Tyr
					645				650					655
Arg	Leu	Val	Leu	Cys	Lys	Thr	Phe	Arg	Leu	Asp	Glu	Asp	Gly	Lys
			660					665					670	
Leu	Thr	Pro	Glu	Glu	Leu	Leu	Tyr	Arg	Ala	Val	Gln	Ser	Val	Asn
		675					680					685		
Thr	His	Asp	Ala	Val	His	Ala	Gln	Met	Asp	Val	Lys	Leu	Arg	Ser
	690					695					700			
Ile	Cys	Val	Gly	Leu	Asn	Glu	Gln	Val	Leu	His	Leu	Trp	Leu	Glu
705					710				715					720
Leu	Cys	Ser	Ser	Leu	Pro	Thr	Val	Glu	Lys	Trp	Tyr	Gln	Pro	Trp
				725					730				735	
Phe	Leu	Arg	Ser	Pro	Gly	Trp	Val	Gln	Ile	Lys	Cys	Glu	Leu	Arg
			740				745					750		
Leu	Cys	Cys	Phe	Ala	Phe	Ser	Leu	Ser	Gln	Asp	Trp	Glu	Leu	Pro
		755				760					765			
Lys	Arg	Glu	Ala	Gln	Gln	Pro	Leu	Lys	Glu	Gly	Val	Arg	Asp	Met
	770					775					780			
Val	Lys	His	His	Leu	Phe	Ser	Trp	Asp	Val	Asp	Gly			
785					790					795	796			

<210> 3139
 <211> 796
 <212> PRT
 <213> Homo sapiens

<400> 3139

Gln	Asp	Arg	Arg	Leu	Leu	Arg	Leu	Glu	Leu	Gln	Lys	Thr	Cys	Gln	Pro
1				5				10						15	
Thr	Ser	Thr	Met	Ser	Gly	Ser	His	Thr	Pro	Ala	Cys	Gly	Pro	Phe	Ser
			20					25					30		
Ala	Leu	Thr	Pro	Ser	Ile	Trp	Pro	Gln	Glu	Ile	Leu	Ala	Lys	Tyr	Thr
		35				40						45			
Gln	Lys	Glu	Glu	Ser	Ala	Glu	Gln	Pro	Glu	Phe	Tyr	Tyr	Asp	Glu	Phe
	50					55					60				
Gly	Phe	Arg	Val	Tyr	Lys	Glu	Glu	Gly	Asp	Glu	Pro	Gly	Ser	Ser	Leu
65				70				75						80	
Leu	Ala	Asn	Ser	Pro	Leu	Met	Glu	Asp	Ala	Pro	Gln	Arg	Leu	Arg	Trp
		85						90					95		
Gln	Ala	His	Leu	Glu	Phe	Thr	His	Asn	His	Asp	Val	Gly	Asp	Leu	Thr
		100					105					110			
Trp	Asp	Lys	Ile	Ala	Val	Ser	Leu	Pro	Arg	Ser	Glu	Lys	Leu	Arg	Ser
	115					120					125				
Leu	Val	Leu	Ala	Gly	Ile	Pro	His	Gly	Met	Arg	Pro	Gln	Leu	Trp	Met
	130				135					140					
Arg	Leu	Ser	Gly	Ala	Leu	Gln	Lys	Lys	Arg	Asn	Ser	Glu	Leu	Ser	Tyr
145					150				155					160	
Arg	Glu	Ile	Val	Lys	Asn	Ser	Ser	Asn	Asp	Glu	Thr	Ile	Ala	Ala	Lys
			165					170					175		
Gln	Ile	Glu	Lys	Asp	Leu	Leu	Arg	Thr	Met	Pro	Ser	Asn	Ala	Cys	Phe
		180					185					190			
Ala	Ser	Met	Gly	Ser	Ile	Gly	Val	Pro	Arg	Leu	Arg	Arg	Val	Leu	Arg
	195					200					205				
Ala	Leu	Ala	Trp	Leu	Tyr	Pro	Glu	Ile	Gly	Tyr	Cys	Gln	Gly	Thr	Gly
	210					215				220					
Met	Val	Ala	Ala	Cys	Leu	Leu	Leu	Phe	Leu	Glu	Glu	Glu	Asp	Ala	Phe
225					230				235					240	
Trp	Met	Met	Ser	Ala	Ile	Ile	Glu	Asp	Leu	Leu	Pro	Ala	Ser	Tyr	Phe
			245					250					255		
Ser	Thr	Thr	Leu	Leu	Gly	Val	Gln	Thr	Asp	Gln	Arg	Val	Leu	Arg	His

260	265	270
Leu Ile Val Gln Tyr Leu Pro Arg	Leu Asp Lys Leu Leu Gln Glu His	
275	280	285
Asp Ile Glu Leu Ser Leu Ile Thr	Leu His Trp Phe Leu Thr Ala Phe	
290	295	300
Ala Ser Val Val Asp Ile Lys Leu Leu Leu Arg	Ile Trp Asp Leu Phe	
305	310	315
Phe Tyr Glu Gly Ser Arg Val Leu Phe Gln Leu Thr	Leu Gly Met Leu	
325	330	335
His Leu Lys Glu Glu Glu Leu Ile Gln Ser Glu Asn Ser	Ala Ser Ile	
340	345	350
Phe Asn Thr Leu Ser Asp Ile Pro Ser Gln Met Glu Asp	Ala Glu Leu	
355	360	365
Leu Leu Gly Val Ala Met Arg Leu Ala Gly Ser Leu Thr	Asp Val Ala	
370	375	380
Val Glu Thr Gln Arg Arg Lys His Leu Ala Tyr Leu Ile	Ala Asp Gln	
385	390	395
Gly Gln Leu Leu Gly Ala Gly Thr Leu Thr Asn Leu Ser	Gln Val Val	
405	410	415
Arg Arg Arg Thr Gln Arg Arg Lys Ser Thr Ile Thr	Ala Leu Leu Phe	
420	425	430
Gly Glu Asp Asp Leu Glu Ala Leu Lys Ala Lys Asn Ile	Lys Gln Thr	
435	440	445
Glu Leu Val Ala Asp Leu Arg Glu Ala Ile Leu Arg Val	Ala Arg His	
450	455	460
Phe Gln Cys Thr Asp Pro Lys Asn Cys Ser Val Val Ser	Arg Gln Leu	
465	470	475
Pro Gly Leu Leu Pro Asn Thr Ala Leu Thr Pro Pro Thr	Pro Leu Val	
485	490	495
Gly Leu Cys Ser Leu Trp Gln Glu Leu Thr Pro Asp Tyr	Ser Met Glu	
500	505	510
Ser His Gln Arg Asp His Glu Asn Tyr Val Ala Cys Ser	Arg Ser His	
515	520	525
Arg Arg Arg Ala Lys Ala Leu Leu Asp Phe Glu Arg His	Asp Asp Asp	
530	535	540
Glu Leu Gly Phe Arg Lys Asn Asp Ile Ile Thr Ile Val	Ser Gln Lys	
545	550	555
Asp Glu His Cys Trp Val Gly Glu Leu Asn Gly Leu Arg	Gly Trp Phe	
565	570	575
Pro Ala Lys Phe Val Glu Val Leu Asp Glu Arg Ser Lys	Glu Tyr Ser	
580	585	590
Ile Ala Gly Asp Asp Ser Val Thr Glu Gly Val Thr Asp	Leu Val Arg	
595	600	605
Gly Thr Leu Cys Pro Ala Leu Lys Ala Leu Phe Glu His	Gly Leu Lys	
610	615	620
Lys Pro Ser Leu Leu Gly Gly Ala Cys His Pro Trp Leu	Phe Ile Glu	
625	630	635
Glu Ala Ala Gly Arg Glu Val Glu Arg Asp Phe Ala Ser	Val Tyr Ser	
645	650	655
Arg Leu Val Leu Cys Lys Thr Phe Arg Leu Asp Glu Asp	Gly Lys Val	
660	665	670
Leu Thr Pro Glu Glu Leu Leu Tyr Arg Ala Val Gln Ser	Val Asn Val	
675	680	685
Thr His Asp Ala Val His Ala Gln Met Asp Val Lys Leu	Arg Ser Leu	
690	695	700
Ile Cys Val Gly Leu Asn Glu Gln Val Leu His Leu Trp	Leu Glu Val	
705	710	715
Leu Cys Ser Ser Leu Pro Thr Val Glu Lys Trp Tyr Gln	Pro Trp Ser	
725	730	735
Phe Leu Arg Ser Pro Gly Trp Val Gln Ile Lys Cys Glu	Leu Arg Val	
740	745	750
Leu Cys Cys Phe Ala Phe Ser Leu Ser Gln Asp Trp Glu	Leu Pro Ala	
755	760	765
Lys Arg Glu Ala Gln Gln Pro Leu Lys Glu Gly Val Arg	Asp Met Leu	

770	775	780
Val Lys His His Leu Phe Ser Trp Asp Val Asp Gly		
785	790	795 796

<210> 3140
 <211> 1646
 <212> PRT
 <213> Homo sapiens

<400> 3140

Ser	Ala	Ala	Leu	Gly	Ala	Ser	Leu	Ala	Ile	Pro	Arg	Pro	Gly	Leu	Pro
1				5					10					15	
Gly	Val	His	Gly	Arg	Gly	Pro	Gly	Thr	Leu	Ser	Gly	Arg	Ala	Met	Glu
			20					25					30		
Gly	Ala	Glu	Pro	Arg	Ala	Arg	Pro	Glu	Arg	Leu	Ala	Glu	Ala	Glu	Thr
			35				40					45			
Arg	Ala	Ala	Asp	Gly	Gly	Arg	Leu	Val	Glu	Val	Gln	Leu	Ser	Gly	Gly
	50					55					60				
Ala	Pro	Trp	Gly	Phe	Thr	Leu	Lys	Gly	Gly	Arg	Glu	His	Gly	Glu	Pro
	65				70					75				80	
Leu	Val	Ile	Thr	Lys	Ile	Glu	Glu	Gly	Ser	Lys	Ala	Ala	Ala	Val	Asp
				85				90						95	
Lys	Leu	Leu	Ala	Gly	Asp	Glu	Ile	Val	Gly	Ile	Asn	Asp	Ile	Gly	Leu
			100					105					110		
Ser	Gly	Phe	Arg	Gln	Glu	Ala	Ile	Cys	Leu	Val	Lys	Gly	Ser	His	Lys
		115					120					125			
Thr	Leu	Lys	Leu	Val	Val	Lys	Arg	Arg	Ser	Glu	Leu	Gly	Trp	Arg	Pro
	130					135						140			
His	Ser	Trp	His	Ala	Thr	Lys	Phe	Ser	Asp	Ser	His	Pro	Glu	Leu	Ala
	145				150					155				160	
Ala	Ser	Pro	Phe	Thr	Ser	Thr	Ser	Gly	Cys	Pro	Ser	Trp	Ser	Gly	Arg
				165				170						175	
His	His	Ala	Ser	Ser	Ser	Ser	His	Asp	Leu	Ser	Ser	Ser	Trp	Glu	Gln
			180					185					190		
Thr	Asn	Leu	Gln	Arg	Thr	Leu	Asp	His	Phe	Ser	Ser	Leu	Gly	Ser	Val
		195					200					205			
Asp	Ser	Leu	Asp	His	Pro	Ser	Ser	Arg	Leu	Ser	Val	Ala	Lys	Ser	Asn
	210					215					220				
Ser	Ser	Ile	Asp	His	Leu	Gly	Ser	His	Ser	Lys	Arg	Asp	Ser	Ala	Tyr
	225				230					235				240	
Gly	Ser	Phe	Ser	Thr	Ser	Ser	Ser	Thr	Pro	Asp	His	Thr	Leu	Ser	Lys
				245				250					255		
Ala	Asp	Thr	Ser	Ser	Ala	Glu	Asn	Ile	Leu	Tyr	Thr	Val	Gly	Leu	Trp
		260						265					270		
Glu	Ala	Pro	Arg	Gln	Gly	Gly	Arg	Gln	Ala	Gln	Ala	Ala	Gly	Asp	Pro
		275					280					285			
Gln	Gly	Ser	Glu	Glu	Lys	Leu	Ser	Cys	Phe	Pro	Pro	Arg	Val	Pro	Gly
	290					295					300				
Asp	Ser	Gly	Lys	Gly	Pro	Arg	Pro	Glu	Tyr	Asn	Ala	Glu	Pro	Lys	Leu
	305				310					315				320	
Ala	Ala	Pro	Gly	Arg	Ser	Asn	Phe	Gly	Pro	Val	Trp	Tyr	Val	Pro	Asp
				325				330						335	
Lys	Lys	Lys	Ala	Pro	Ser	Ser	Pro	Pro	Pro	Pro	Pro	Pro	Pro	Leu	Arg
			340					345					350		
Ser	Asp	Ser	Phe	Ala	Ala	Thr	Lys	Ser	His	Glu	Lys	Ala	Gln	Gly	Pro
		355				360						365			
Val	Phe	Ser	Glu	Ala	Ala	Ala	Ala	Gln	His	Phe	Thr	Ala	Leu	Ala	Gln
	370					375					380				
Ala	Gln	Pro	Arg	Gly	Asp	Arg	Arg	Pro	Glu	Leu	Thr	Asp	Arg	Pro	Trp
	385				390					395				400	
Arg	Ser	Ala	His	Pro	Gly	Ser	Leu	Gly	Lys	Gly	Ser	Gly	Gly	Pro	Gly

4825

915	920	925
Asp Asp Ile Leu Asp Val Ser Leu Asp Pro Gln Glu Arg Pro Gln His		
930	935	940
Val His Gly Arg Ser Arg Ser Ser Pro Ser Thr Asp His Tyr Lys Gln		
945	950	955
Glu Ala Ser Val Glu Leu Arg Arg Gln Ala Gly Asp Pro Gly Glu Pro		
965	970	975
Arg Glu Glu Leu Pro Ser Ala Val Arg Ala Glu Glu Gly Gln Ser Thr		
980	985	990
Pro Arg Gln Ala Asp Ala Gln Cys Arg Glu Gly Ser Pro Gly Ser Gln		
995	1000	1005
Gln His Pro Pro Ser Gln Lys Ala Pro Asn Pro Pro Thr Phe Ser Glu		
1010	1015	1020
Leu Ser His Cys Arg Gly Ala Pro Glu Leu Pro Arg Glu Gly Arg Gly		
1025	1030	1035
Arg Ala Gly Thr Leu Pro Arg Asp Tyr Arg Tyr Ser Glu Glu Ser Thr		
1045	1050	1055
Pro Ala Asp Leu Gly Pro Arg Ala Gln Ser Pro Gly Ser Pro Leu His		
1060	1065	1070
Ala Arg Gly Gln Asp Ser Trp Pro Val Ser Ser Ala Leu Leu Ser Lys		
1075	1080	1085
Arg Pro Ala Pro Gln Arg Pro Pro Pro Lys Arg Glu Pro Arg Arg		
1090	1095	1100
Tyr Arg Ala Thr Asp Gly Ala Pro Ala Asp Ala Pro Val Gly Val Leu		
1105	1110	1115
Gly Arg Pro Phe Pro Thr Pro Ser Pro Ala Ser Leu Asp Val Tyr Val		
1125	1130	1135
Ala Arg Leu Ser Leu Ser His Ser Pro Ser Val Phe Ser Ser Ala Gln		
1140	1145	1150
Pro Gln Asp Thr Pro Lys Ala Thr Val Cys Glu Arg Gly Ser Gln His		
1155	1160	1165
Val Ser Gly Asp Ala Ser Arg Pro Leu Pro Glu Ala Leu Leu Pro Pro		
1170	1175	1180
Lys Gln Gln His Leu Arg Leu Gln Thr Ala Thr Met Glu Thr Ser Arg		
1185	1190	1195
Ser Pro Ser Pro Gln Phe Ala Pro Gln Lys Leu Thr Asp Lys Pro Pro		
1205	1210	1215
Leu Leu Ile Gln Asp Glu Asp Ser Thr Arg Ile Glu Arg Val Met Asp		
1220	1225	1230
Asn Asn Thr Thr Val Lys Met Val Pro Ile Lys Ile Val His Ser Glu		
1235	1240	1245
Ser Gln Pro Glu Lys Glu Ser Arg Gln Ser Leu Ala Cys Pro Ala Glu		
1250	1255	1260
Pro Pro Ala Leu Pro His Gly Leu Glu Lys Asp Gln Ile Lys Thr Leu		
1265	1270	1275
Ser Thr Ser Glu Gln Phe Tyr Ser Arg Phe Cys Leu Tyr Thr Arg Gln		
1285	1290	1295
Gly Ala Glu Pro Glu Ala Pro His Arg Ala Gln Pro Ala Glu Pro Gln		
1300	1305	1310
Pro Leu Gly Thr Gln Val Pro Pro Glu Lys Asp Arg Cys Thr Ser Pro		
1315	1320	1325
Pro Gly Leu Ser Tyr Met Lys Ala Lys Glu Lys Thr Val Glu Asp Leu		
1330	1335	1340
Lys Ser Glu Glu Leu Ala Arg Glu Ile Val Gly Lys Asp Lys Ser Leu		
1345	1350	1355
Ala Asp Ile Leu Asp Pro Ser Val Lys Ile Lys Thr Thr Met Asp Leu		
1365	1370	1375
Met Glu Gly Ile Phe Pro Lys Asp Glu His Leu Leu Glu Glu Ala Gln		
1380	1385	1390
Gln Arg Arg Lys Leu Leu Pro Lys Ile Pro Ser Pro Arg Ser Thr Glu		
1395	1400	1405
Glu Arg Lys Glu Glu Pro Ser Val Pro Ala Ala Val Ser Leu Ala Thr		
1410	1415	1420
Asn Ser Thr Tyr Tyr Ser Thr Ser Ala Pro Lys Ala Glu Leu Leu Ile		

1425 1430 1435 1440
 Lys Met Lys Asp Leu Gln Glu Gln Gln Glu His Glu Glu Asp Ser Gly
 1445 1450 1455
 Ser Asp Leu Asp His Asp Leu Ser Val Lys Lys Gln Glu Leu Ile Glu
 1460 1465 1470
 Ser Ile Ser Arg Lys Leu Gln Val Leu Arg Glu Ala Arg Glu Ser Leu
 1475 1480 1485
 Leu Glu Asp Val Gln Ala Asn Thr Val Leu Gly Ala Glu Val Glu Ala
 1490 1495 1500
 Ile Val Lys Gly Val Cys Lys Pro Ser Glu Phe Asp Lys Phe Arg Met
 1505 1510 1515 1520
 Phe Ile Gly Asp Leu Asp Lys Val Val Asn Leu Leu Leu Ser Leu Ser
 1525 1530 1535
 Gly Arg Leu Ala Arg Val Glu Asn Ala Leu Asn Asn Leu Asp Asp Gly
 1540 1545 1550
 Ala Ser Pro Gly Asp Arg Gln Ser Leu Leu Glu Lys Gln Arg Val Leu
 1555 1560 1565
 Ile Gln Gln His Glu Asp Ala Lys Glu Leu Lys Glu Asn Leu Asp Arg
 1570 1575 1580
 Arg Glu Arg Ile Val Phe Asp Ile Leu Ala Asn Tyr Leu Ser Glu Glu
 1585 1590 1595 1600
 Ser Leu Ala Asp Tyr Glu His Phe Val Lys Met Lys Ser Ala Leu Ile
 1605 1610 1615
 Ile Glu Gln Arg Glu Leu Glu Asp Lys Ile His Leu Gly Glu Glu Gln
 1620 1625 1630
 Leu Lys Cys Leu Leu Asp Ser Leu Gln Pro Glu Arg Gly Lys
 1635 1640 1645 1646

<210> 3141
 <211> 599
 <212> PRT
 <213> Homo sapiens

<400> 3141
 Ser Pro Arg Gly Ala Thr Met Glu Thr Pro Pro Leu Pro Pro Ala Cys
 1 5 10 15
 Thr Lys Gln Gly His Gln Lys Pro Leu Asp Ser Lys Asp Asp Asn Thr
 20 25 30
 Glu Lys His Cys Pro Val Thr Val Asn Pro Trp His Met Lys Lys Ala
 35 40 45
 Phe Lys Val Met Asn Glu Leu Arg Ser Gln Asn Leu Leu Cys Asp Val
 50 55 60
 Thr Ile Val Ala Glu Asp Met Glu Ile Ser Ala His Arg Val Val Leu
 65 70 75 80
 Ala Ala Cys Ser Pro Tyr Phe His Ala Met Phe Thr Gly Glu Met Ser
 85 90 95
 Glu Ser Arg Ala Lys Arg Val Arg Ile Lys Glu Val Asp Gly Trp Thr
 100 105 110
 Leu Arg Met Leu Ile Asp Tyr Val Tyr Thr Ala Glu Ile Gln Val Thr
 115 120 125
 Glu Glu Asn Val Gln Val Leu Leu Pro Ala Ala Gly Leu Leu Gln Leu
 130 135 140
 Gln Asp Val Lys Lys Thr Cys Cys Glu Phe Leu Glu Ser Gln Leu His
 145 150 155 160
 Pro Val Asn Cys Leu Gly Ile Arg Ala Phe Ala Asp Met His Ala Cys
 165 170 175
 Thr Asp Leu Leu Asn Lys Ala Asn Thr Tyr Ala Glu Gln His Phe Ala
 180 185 190
 Asp Val Val Leu Ser Glu Glu Phe Leu Asn Leu Gly Ile Glu Gln Val
 195 200 205
 Cys Ser Leu Ile Ser Ser Asp Lys Leu Thr Ile Ser Ser Glu Glu Lys

210	215	220
Val Phe Glu Ala Val	Ile Ala Trp Val	Asn His Asp Lys Asp Val Arg
225	230	235
Gln Glu Phe Met Ala	Arg Leu Met Glu	His Val Arg Leu Pro Leu Leu
245	250	255
Pro Arg Glu Tyr Leu	Val Gln Arg Val	Glu Glu Glu Ala Leu Val Lys
260	265	270
Asn Ser Ser Ala Cys	Lys Asn Tyr Leu	Ile Glu Ala Met Lys Tyr His
275	280	285
Leu Leu Pro Thr Glu	Gln Arg Ile Leu	Met Lys Ser Val Arg Thr Arg
290	295	300
Leu Arg Thr Pro Met	Asn Leu Pro Lys	Leu Met Val Val Val Gly Gly
305	310	315
Gln Ala Pro Lys Ala	Ile Arg Ser Ala	Glu Cys Tyr Asp Phe Lys Glu
325	330	335
Gln Arg Trp His Gln	Val Ala Glu Leu	Pro Ser Arg Arg Cys Arg Ala
340	345	350
Gly Met Val Tyr Leu	Ala Gly Leu Val	Phe Ala Val Gly Gly Phe Asn
355	360	365
Gly Ser Leu Arg Val	Arg Thr Val Asp	Ser Tyr Asp Pro Val Lys Asp
370	375	380
Gln Trp Thr Ser Val	Ala Asn Met Arg	Asp Arg Arg Ser Thr Leu Gly
385	390	395
Ala Ala Val Leu Asn	Gly Leu Leu Tyr	Ala Val Gly Gly Phe Asp Gly
405	410	415
Ser Thr Gly Leu Ser	Ser Val Glu Ala	Tyr Asn Ile Lys Ser Asn Glu
420	425	430
Trp Phe His Val Ala	Pro Met Asn Thr	Arg Arg Ser Ser Val Gly Val
435	440	445
Gly Val Val Gly Gly	Leu Leu Tyr Ala	Val Gly Gly Tyr Asp Gly Ala
450	455	460
Ser Arg Gln Tyr Leu	Ser Thr Val Glu	Cys Tyr Asn Ala Thr Thr Asn
465	470	475
Glu Trp Thr Tyr Ile	Ala Glu Met Ser	Thr Arg Arg Ser Gly Ala Gly
485	490	495
Val Gly Val Leu Asn	Asn Leu Leu Tyr	Ala Val Gly Gly His Asp Gly
500	505	510
Pro Leu Val Arg Lys	Ser Val Glu Val	Tyr Asp Pro Thr Thr Asn Ala
515	520	525
Trp Arg Gln Val Ala	Asp Met Asn Met	Cys Arg Arg Asn Ala Gly Val
530	535	540
Cys Ala Val Asn Gly	Leu Leu Tyr Val	Val Gly Gly Asp Asp Gly Ser
545	550	555
Cys Asn Leu Ala Ser	Val Glu Tyr Tyr	Asn Pro Thr Thr Asp Lys Trp
565	570	575
Thr Val Val Ser Ser	Cys Met Ser Thr	Gly Arg Ser Tyr Ala Gly Val
580	585	590
Thr Val Ile Asp Lys	Pro Leu	
595	599	

<210> 3142
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 3142
 Phe Ser Asn Leu Thr Thr Glu Lys Val Ala His Ala Lys Glu Glu Asn
 1 5 10 15
 Leu Ser Met His Gln Met Leu Asp Gln Thr Leu Leu Glu Leu Asn Asn
 20 25 30
 Met

33

<210> 3143
 <211> 255
 <212> PRT
 <213> Homo sapiens

<400> 3143
 Ser Glu Glu Leu Asp Arg Glu Lys Lys Leu Lys Glu Asp Ser Pro Arg
 1 5 10 15
 Lys Thr Pro Asn Lys Glu Ser Gly Val Pro Ser Leu Pro Val Ser Leu
 20 25 30
 Thr Ser Ile Lys Glu Glu Pro Lys Glu Ala Lys His Pro Asp Ser Gln
 35 40 45
 Ser Met Glu Glu Ser Lys Leu Lys Asn Asp Asp Arg Lys Thr Pro Val
 50 55 60
 Asn Trp Lys Asp Ser Arg Gly Thr Arg Val Ala Val Ser Ser Pro Met
 65 70 75 80
 Ser Gln His Gln Ser Tyr Ile Gln Tyr Leu His Ala Tyr Pro Tyr Pro
 85 90 95
 Gln Met Tyr Asp Pro Ser His Pro Ala Tyr Arg Ala Val Ser Pro Val
 100 105 110
 Leu Met His Ser Tyr Pro Gly Ala Tyr Leu Ser Pro Gly Phe His Tyr
 115 120 125
 Pro Val Tyr Gly Lys Met Ser Gly Arg Glu Glu Thr Glu Lys Val Asn
 130 135 140
 Thr Ser Pro Ser Val Asn Thr Lys Thr Thr Thr Glu Ser Lys Ala Leu
 145 150 155 160
 Asp Leu Leu Gln Gln His Ala Asn Gln Tyr Arg Ser Lys Ser Pro Ala
 165 170 175
 Pro Val Glu Lys Ala Thr Ala Glu Arg Glu Arg Glu Ala Glu Arg Glu
 180 185 190
 Arg Asp Arg His Ser Pro Phe Gly Gln Arg His Leu His Thr His His
 195 200 205
 His Thr His Val Gly Met Gly Tyr Pro Leu Ile Pro Gly Gln Tyr Asp
 210 215 220
 Pro Phe Gln Gly Leu Thr Ser Ala Ala Leu Val Ala Ser Gln Gln Val
 225 230 235 240
 Ala Ala Gln Ala Ser Ala Ser Gly Met Phe Pro Gly Gln Arg Arg
 245 250 255

<210> 3144
 <211> 175
 <212> PRT
 <213> Homo sapiens

<400> 3144
 Ser Val Ser Gly Ile Val Leu Asp Leu Leu Pro Tyr Leu His Phe Leu
 1 5 10 15
 Ser Asn Met Asn Leu Asp Gly Ser Ala Gln Asp Pro Glu Lys Arg Glu
 20 25 30
 Tyr Ser Ser Val Cys Val Gly Arg Glu Asp Asp Ile Lys Lys Ser Glu
 35 40 45
 Arg Met Thr Ala Val Val His Asp Arg Glu Val Val Ile Phe Tyr His
 50 55 60
 Lys Gly Glu Tyr His Ala Met Asp Ile Arg Cys Tyr His Ser Gly Gly
 65 70 75 80
 Pro Leu His Leu Gly Asp Ile Glu Asp Phe Asp Gly Arg Pro Cys Ile

				85					90					95			
Val	Cys	Pro	Trp	His	Lys	Tyr	Lys	Ile	Thr	Leu	Ala	Thr	Gly	Glu	Gly		
			100					105					110				
Leu	Tyr	Gln	Ser	Ile	Asn	Pro	Lys	Asp	Pro	Ser	Ala	Lys	Pro	Lys	Trp		
		115					120					125					
Cys	Ser	Lys	Gly	Ile	Lys	Gln	Arg	Ile	His	Thr	Val	Thr	Val	Asp	Asn		
		130				135					140						
Gly	Asn	Ile	Tyr	Val	Thr	Leu	Ser	Asn	Glu	Pro	Phe	Lys	Cys	Asp	Ser		
145					150				155					160			
Asp	Phe	Tyr	Ala	Thr	Gly	Asp	Phe	Lys	Val	Ile	Lys	Ser	Ser	Ser			
				165				170						175			

<210> 3145
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 3145

Arg	Asn	Ser	Leu	Leu	Pro	Pro	Leu	His	Leu	Asp	Asn	Ser	Thr	Pro			
1			5					10					15				
Ala	Lys	Met	Ser	Cys	Gln	Gln	Asn	Gln	Gln	Gln	Cys	Gln	Pro	Pro	Pro		
		20					25					30					
Lys	Cys	Pro	Ser	Pro	Lys	Cys	Pro	Pro	Lys	Ser	Pro	Val	Gln	Cys	Leu		
		35				40					45						
Pro	Pro	Ala	Ser	Ser	Gly	Cys	Ala	Pro	Ser	Ser	Gly	Gly	Cys	Gly	Pro		
		50				55					60						
Ser	Ser	Glu	Gly	Gly	Cys	Phe	Leu	Asn	His	His	Arg	Arg	His	His	Arg		
65				70					75					80			
Cys	Arg	Arg	Gln	Arg	Pro	Asn	Ser	Cys	Asp	Arg	Gly	Ser	Gly	Gln	Gln		
			85					90						95			
Gly	Gly	Gly	Ser	Gly	Cys	Gly	His	Gly	Ser	Gly	Gly	Cys	Cys				
			100					105					110				

<210> 3146
 <211> 382
 <212> PRT
 <213> Homo sapiens

<400> 3146

Val	Cys	Thr	Ala	Leu	Gln	Glu	Phe	Gly	Thr	Arg	Ser	Thr	Leu	Leu	Arg		
1			5					10					15				
Cys	Leu	Asp	Ser	Gly	Phe	Arg	Pro	Gly	Ala	Ser	Arg	Gly	Leu	Val	Gly		
		20					25					30					
Ser	Trp	Ala	Ala	Met	Glu	Ser	Thr	Leu	Gly	Ala	Gly	Ile	Val	Ile	Ala		
		35				40					45						
Glu	Ala	Leu	Gln	Asn	Gln	Leu	Ala	Trp	Leu	Glu	Asn	Val	Trp	Leu	Trp		
		50			55						60						
Ile	Thr	Phe	Leu	Gly	Asp	Pro	Lys	Ile	Leu	Phe	Leu	Phe	Tyr	Phe	Pro		
65				70					75					80			
Ala	Ala	Tyr	Tyr	Ala	Ser	Arg	Arg	Val	Gly	Ile	Ala	Val	Leu	Trp	Ile		
			85					90						95			
Ser	Leu	Ile	Thr	Glu	Trp	Leu	Asn	Leu	Ile	Phe	Lys	Trp	Phe	Leu	Phe		
		100						105				110					
Gly	Asp	Arg	Pro	Phe	Trp	Trp	Val	His	Glu	Ser	Gly	Tyr	Tyr	Ser	Gln		
		115				120					125						
Ala	Pro	Ala	Gln	Val	His	Gln	Phe	Pro	Ser	Ser	Cys	Glu	Thr	Gly	Pro		
		130				135					140						
Gly	Ser	Pro	Ser	Gly	His	Cys	Met	Ile	Thr	Gly	Ala	Ala	Leu	Trp	Pro		

145				150				155				160
Ile Met Thr Ala	Leu Ser Ser Gln Val	Ala Thr Arg Ala Arg Ser Arg										
	165			170							175	
Trp Val Arg Val	Met Pro Ser Leu Ala Tyr Cys Thr Phe Leu Leu Ala											
	180			185							190	
Val Gly Leu Ser Arg	Ile Phe Ile Leu Ala His Phe Pro His Gln Val											
	195			200						205		
Leu Ala Gly Leu Ile Thr	Gly Ala Val Leu Gly Trp Leu Met Thr Pro											
	210			215						220		
Arg Val Pro Met Glu Arg	Glu Leu Ser Phe Tyr Gly Leu Thr Ala Leu											
	225			230						235		240
Ala Leu Met Leu Gly Thr	Ser Leu Ile Tyr Trp Thr Leu Phe Thr Leu											
	245			250							255	
Gly Leu Asp Leu Ser Trp	Ser Ile Ser Leu Ala Phe Lys Trp Cys Glu											
	260			265						270		
Arg Pro Glu Trp Ile His	Val Asp Ser Arg Pro Phe Ala Ser Leu Ser											
	275			280						285		
Arg Asp Ser Gly Ala Ala	Leu Gly Leu Gly Ile Ala Leu His Ser Pro											
	290			295						300		
Cys Tyr Ala Gln Val Arg	Arg Ala Gln Leu Gly Asn Gly Gln Lys Ile											
	305			310						315		320
Ala Cys Leu Val Leu Ala	Met Gly Leu Leu Gly Pro Leu Asp Trp Leu											
	325			330							335	
Gly His Pro Pro Gln Ile	Ser Leu Phe Tyr Ile Phe Asn Phe Leu Lys											
	340			345						350		
Tyr Thr Leu Trp Pro Cys	Leu Val Leu Ala Leu Val Pro Trp Ala Val											
	355			360						365		
His Met Phe Ser Ala Gln	Glu Ala Pro Pro Ile His Ser Ser											
	370			375						380		382

<210> 3147

<211> 280

<212> PRT

<213> Homo sapiens

<400> 3147

Arg Ser Phe Ser Leu Ser Phe Ser Leu Leu Ser Pro Ser Glu Met Met												
1	5	10	15									
Ala Leu Gly Ala Ala Gly Ala Thr Arg Val Phe Val Ala Met Val Ala												
	20	25	30									
Ala Ala Leu Gly Gly His Pro Leu Leu Gly Val Ser Ala Thr Leu Asn												
	35	40	45									
Ser Val Leu Asn Ser Asn Ala Ile Lys Asn Leu Pro Pro Pro Leu Gly												
	50	55	60									
Gly Ala Ala Gly His Pro Gly Ser Ala Val Ser Ala Ala Pro Gly Ile												
	65	70	75								80	
Leu Tyr Pro Gly Gly Asn Lys Tyr Gln Thr Ile Asp Asn Tyr Gln Pro												
	85	90	95									
Tyr Pro Cys Ala Glu Asp Glu Glu Cys Gly Thr Asp Glu Tyr Cys Ala												
	100	105	110									
Ser Pro Thr Arg Gly Gly Asp Ala Gly Val Gln Ile Cys Leu Ala Cys												
	115	120	125									
Arg Lys Arg Arg Lys Arg Cys Met Arg His Ala Met Cys Cys Pro Gly												
	130	135	140									
Asn Tyr Cys Lys Asn Gly Ile Cys Val Ser Ser Asp Gln Asn His Phe												
	145	150	155								160	
Arg Gly Glu Ile Glu Glu Thr Ile Thr Glu Ser Phe Gly Asn Asp His												
	165	170	175									
Ser Thr Leu Asp Gly Tyr Ser Arg Arg Thr Thr Leu Ser Ser Lys Met												
	180	185	190									
Tyr His Thr Lys Gly Gln Glu Gly Ser Val Cys Leu Arg Ser Ser Asp												

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<210> 3148
<211> 520
<212> PRT
<213> Homo sapiens
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4832

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      340      345      350
Leu Glu Ala Glu Cys Phe Pro Val Lys Pro His Asn Lys Ser Phe Ala
      355      360      365
His Ile Leu Glu Leu Val Lys Glu Gly Ser Ser Cys Pro Gly Gln Leu
      370      375      380
Arg Gln Arg Gln Ala Ala Ser Trp Gly Val Ala Gly Arg Glu Ala Glu
385      390      395      400
Gly Gly Arg Pro Pro Ala Ala Thr Ser Pro Ala Glu Val Val Trp Ser
      405      410      415
Ser Glu Lys Thr Pro Lys Ala Asp Gln Asp Gly Arg Gly Asp Pro Gly
      420      425      430
Glu Gly Glu Glu Val Ala Trp Glu Gln Ala Ala Val Ala Phe Asp Ala
      435      440      445
Val Leu Arg Phe Ala Glu Arg Gln Pro Cys Phe Ser Ala Gln Glu Val
450      455      460
Gly Gln Leu Arg Ala Leu Arg Ala Val Phe Arg Ser Gln Gln Gln Val
465      470      475      480
Arg Arg Arg Arg Gly Ala Leu Gly Ala Val Val Lys Val Glu Ala Leu
      485      490      495
Gln Glu Gly Pro Gly Gly Cys Gly Ala Thr Ala Gln Ser Pro Leu Pro
500      505      510
Cys Ser Ser Thr Ala Gly Asp Asn
      515      520

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<210> 3149
<211> 1331
<212> PRT
<213> Homo sapiens

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      <400> 3149
Val Ala Val Met Ile Ser Thr Ala Pro Leu Tyr Ser Gly Val His Asn
1      5      10      15
Trp Thr Ser Ser Asp Arg Ile Arg Met Cys Gly Ile Asn Glu Glu Arg
      20      25      30
Arg Ala Pro Leu Ser Asp Glu Glu Ser Thr Thr Gly Asp Cys Gln His
      35      40      45
Phe Gly Ser Gln Glu Phe Cys Val Ser Ser Ser Phe Ser Lys Val Glu
50      55      60
Leu Thr Ala Val Gly Ser Gly Ser Asn Ala Arg Gly Ala Asp Pro Asp
65      70      75      80
Gly Ser Ala Thr Glu Lys Leu Gly His Lys Ser Glu Asp Lys Pro Asp
      85      90      95
Asp Pro Gln Pro Lys Met Asp Tyr Ala Gly Asn Val Ala Glu Ala Glu
      100      105      110
Gly Leu Leu Val Pro Leu Ser Ser Pro Gly Asp Gly Leu Lys Leu Pro
115      120      125
Ala Ser Asp Ser Ala Glu Ala Ser Asn Ser Arg Ala Asp Cys Ser Trp
130      135      140
Thr Pro Leu Asn Thr Gln Met Ser Lys Gln Val Asp Cys Ser Pro Ala
145      150      155      160
Gly Val Lys Ala Leu Asp Ser Arg Gln Gly Val Gly Glu Lys Asn Thr
      165      170      175
Phe Ile Leu Ala Thr Leu Gly Thr Gly Val Pro Val Glu Gly Thr Leu
180      185      190
Pro Leu Val Thr Thr Asn Phe Ser Pro Leu Pro Ala Pro Ile Cys Pro
195      200      205
Pro Ala Pro Ser Ser Ala Ser Val Pro His Ser Val Pro Asp Ala Phe
210      215      220
Gln Ala Pro Val Pro Pro Ser Ala Pro Thr Leu Val Leu Ala Pro Val
225      230      235      240
Pro Thr Pro Val Leu Ala Pro Met Pro Ala Ser Thr Pro Pro Ala Ala

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4834

755	760	765
Pro Thr Ser Val Val Ser Glu Phe Ser Gly Val Pro Ser Leu Ser Ser		
770	775	780
Ser Glu Ala Val His Gly Leu Pro Glu Gly Gln Pro Arg Pro Gly Gly		
785	790	795
Ser Phe Val Pro Glu Gln Asp Pro Val Thr Lys Asn Lys Thr Cys Arg		800
	805	810
Ile Ala Ala Lys Pro Tyr Glu Glu Gln Val Asn Pro Val Leu Leu Thr		815
	820	825
Leu Ser Pro Gln Thr Gly Thr Leu Ala Leu Ser Val Gln Pro Ser Gly		830
	835	840
Gly Asp Ile Arg Met Asn Gln Gly Pro Glu Glu Ser Glu Ser His Leu		845
	850	855
Cys Ser Asp Ser Thr Pro Lys Met Glu Gly Pro Gln Gly Ala Cys Gly		860
865	870	875
Leu Lys Leu Ala Gly Asp Thr Lys Pro Lys Asn Gln Val Leu Ala Thr		880
	885	890
Tyr Met Ser His Glu Leu Val Leu Ala Thr Pro Gln Asn Leu Pro Lys		895
	900	905
Met Pro Glu Leu Pro Leu Leu Pro His Asp Ser His Pro Lys Glu Leu		910
	915	920
Ile Leu Asp Val Val Pro Ser Ser Arg Arg Gly Ser Ser Thr Glu Arg		925
930	935	940
Pro Gln Leu Gly Ser Gln Val Asp Leu Gly Arg Val Lys Met Glu Lys		945
	950	955
Val Asp Gly Asp Val Val Phe Asn Leu Ala Thr Cys Phe Arg Ala Asp		960
	965	970
Gly Leu Pro Val Ala Pro Gln Arg Gly Gln Ala Glu Val Arg Ala Lys		975
	980	985
Ala Gly Gln Ala Arg Val Lys Gln Glu Ser Val Gly Val Phe Ala Cys		990
	995	1000
Lys Asn Lys Trp Gln Pro Asp Asp Val Thr Glu Ser Leu Pro Pro Lys		1005
	1010	1015
Lys Met Lys Cys Gly Lys Glu Lys Asp Ser Glu Glu Gln Gln Leu Gln		1020
1025	1030	1035
Pro Gln Ala Lys Ala Val Val Arg Ser Ser His Arg Pro Lys Cys Arg		1040
	1045	1050
Lys Leu Pro Ser Asp Pro Gln Glu Ser Thr Lys Lys Ser Pro Arg Gly		1055
	1060	1065
Ala Ser Asp Ser Gly Lys Glu His Asn Gly Val Arg Gly Lys His Lys		1070
	1075	1080
His Arg Lys Pro Thr Lys Pro Glu Ser Gln Ser Pro Gly Lys Arg Ala		1085
	1090	1095
Asp Ser His Glu Glu Gly Ser Leu Glu Lys Lys Ala Lys Ser Ser Phe		1100
1105	1110	1115
Arg Asp Phe Ile Pro Val Val Leu Ser Thr Arg Thr Arg Ser Gln Ser		1120
	1125	1130
Asp Leu Lys Ala Arg Lys Gln Lys Thr Ser Ser Ser Gln Ser Leu Glu		1135
	1140	1145
His Arg Leu Arg Asn Arg Asn Leu Leu Pro Asn Lys Val Gln Gly		1150
	1155	1160
Ile Ser Asp Ser Pro Asn Gly Phe Leu Pro Asn Asn Leu Glu Glu Pro		1165
	1170	1175
Ala Cys Leu Glu Asn Ser Glu Lys Pro Ser Gly Lys Arg Lys Cys Lys		1180
1185	1190	1195
Thr Lys His Met Ala Thr Val Ser Glu Glu Ala Lys Gly Lys Gly Arg		1200
	1205	1210
Trp Ser Gln Gln Lys Thr Arg Ser Pro Lys Ser Pro Thr Pro Val Lys		1215
	1220	1225
Pro Thr Glu Pro Cys Thr Pro Ser Lys Ser Arg Ser Ala Ser Ser Glu		1230
	1235	1240
Glu Ala Ser Glu Ser Pro Thr Ala Arg Gln Ile Pro Pro Glu Ala Arg		1245
	1250	1255
Arg Leu Ile Val Asn Lys Asn Ala Gly Glu Thr Leu Leu Gln Arg Ala		1260

1265 1270 1275 1280
 Ala Arg Leu Gly Tyr Lys Asp Val Val Leu Tyr Cys Leu Gln Lys Asp
 1285 1290 1295
 Ser Glu Asp Val Asn His Arg Asp Asn Ala Gly Tyr Thr Ala Leu His
 1300 1305 1310
 Glu Ala Cys Ser Arg Gly Trp Thr Asp Ile Leu Asn Ile Leu Leu Glu
 1315 1320 1325
 His Gly Ala
 13301331

<210> 3150
 <211> 931
 <212> PRT
 <213> Homo sapiens

<400> 3150
 Ser Leu Arg Met His Asn Leu Ser Ile Leu Val Arg Gln Ile Lys Phe
 1 5 10 15
 Tyr Tyr Gln Glu Thr Leu Gln Gln Leu Ile Met Met Ser Leu Pro Asn
 20 25 30
 Val Leu Ile Ile Gly Lys Asn Pro Phe Ser Glu Gln Gly Thr Glu Glu
 35 40 45
 Val Lys Lys Leu Leu Leu Leu Leu Leu Gly Cys Ala Val Gln Cys Gln
 50 55 60
 Lys Lys Glu Glu Phe Ile Glu Arg Ile Gln Gly Leu Asp Phe Asp Thr
 65 70 75 80
 Lys Ala Ala Val Ala Ala His Ile Gln Glu Val Thr His Asn Gln Glu
 85 90 95
 Asn Val Phe Asp Leu Gln Trp Met Glu Val Thr Asp Met Ser Gln Glu
 100 105 110
 Asp Ile Glu Pro Leu Leu Lys Asn Met Ala Leu His Leu Lys Arg Leu
 115 120 125
 Ile Asp Glu Arg Asp Glu His Ser Glu Thr Ile Ile Glu Leu Ser Glu
 130 135 140
 Glu Arg Asp Gly Leu His Phe Leu Pro His Ala Ser Ser Ser Ala Gln
 145 150 155 160
 Ser Pro Cys Gly Ser Pro Gly Met Lys Arg Thr Glu Ser Arg Gln His
 165 170 175
 Leu Ser Val Glu Leu Ala Asp Ala Lys Ala Lys Ile Arg Arg Leu Arg
 180 185 190
 Gln Glu Leu Glu Glu Lys Thr Glu Gln Leu Leu Asp Cys Lys Gln Glu
 195 200 205
 Leu Glu Gln Met Glu Ile Glu Leu Lys Arg Leu Gln Gln Glu Asn Met
 210 215 220
 Asn Leu Leu Ser Asp Ala Arg Ser Ala Arg Met Tyr Arg Asp Glu Leu
 225 230 235 240
 Asp Ala Leu Arg Glu Lys Ala Val Arg Val Asp Lys Leu Glu Ser Glu
 245 250 255
 Val Ser Arg Tyr Lys Glu Arg Leu His Asp Ile Glu Phe Tyr Lys Ala
 260 265 270
 Arg Val Glu Glu Leu Lys Glu Asp Asn Gln Val Leu Leu Glu Thr Lys
 275 280 285
 Thr Met Leu Glu Asp Gln Leu Glu Gly Thr Arg Ala Arg Ser Asp Lys
 290 295 300
 Leu His Glu Leu Glu Lys Glu Asn Leu Gln Leu Lys Ala Lys Leu His
 305 310 315 320
 Asp Met Glu Met Glu Arg Asp Met Asp Arg Lys Lys Ile Glu Glu Leu
 325 330 335
 Met Glu Glu Asn Met Thr Leu Glu Met Ala Gln Lys Gln Ser Met Asp
 340 345 350
 Glu Ser Leu His Leu Gly Trp Glu Leu Glu Gln Ile Ser Arg Thr Ser

4837

865					870					875				880
Arg	Tyr	Lys	Leu	Leu	Glu	Ser	Lys	Leu	Glu	Ser	Thr	Leu	Lys	Lys
				885					890					895
Leu	Glu	Ile	Lys	Glu	Glu	Lys	Ile	Ala	Ala	Leu	Glu	Ala	Arg	Leu
			900					905					910	
Glu	Ser	Thr	Asn	Tyr	Asn	Gln	Gln	Leu	Arg	Gln	Glu	Leu	Lys	Thr
			915				920						925	
Lys	Lys	Lys												
	930	931												

<210> 3151

<211> 838

<212> PRT

<213> Homo sapiens

<400> 3151

Gly	Phe	Trp	Leu	His	Leu	Thr	Leu	Leu	Gly	Ala	Ser	Leu	Pro	Ala	Ala
1				5					10					15	
Leu	Gly	Trp	Met	Asp	Pro	Gly	Thr	Ser	Arg	Gly	Pro	Asp	Val	Gly	Val
			20					25					30		
Gly	Glu	Ser	Gln	Ala	Glu	Glu	Pro	Arg	Ser	Phe	Glu	Val	Thr	Arg	Arg
			35				40					45			
Glu	Gly	Leu	Ser	Ser	His	Asn	Glu	Leu	Leu	Ala	Ser	Cys	Gly	Lys	Lys
			50			55					60				
Phe	Cys	Ser	Arg	Gly	Ser	Arg	Cys	Val	Leu	Ser	Arg	Lys	Thr	Gly	Glu
			65			70					75				80
Pro	Glu	Cys	Gln	Cys	Leu	Glu	Ala	Cys	Arg	Pro	Ser	Tyr	Val	Pro	Val
			85						90					95	
Cys	Gly	Ser	Asp	Gly	Arg	Phe	Tyr	Glu	Asn	His	Cys	Lys	Leu	His	Arg
			100					105					110		
Ala	Ala	Cys	Leu	Leu	Gly	Lys	Arg	Ile	Thr	Val	Ile	His	Ser	Lys	Asp
			115				120						125		
Cys	Phe	Leu	Lys	Gly	Asp	Thr	Cys	Thr	Met	Ala	Gly	Tyr	Ala	Arg	Leu
			130			135					140				
Lys	Asn	Val	Leu	Leu	Ala	Leu	Gln	Thr	Arg	Leu	Gln	Pro	Leu	Gln	Glu
			145			150				155					160
Gly	Asp	Ser	Arg	Gln	Asp	Pro	Ala	Ser	Gln	Lys	Arg	Leu	Leu	Val	Glu
				165				170						175	
Ser	Leu	Phe	Arg	Asp	Leu	Asp	Ala	Asp	Gly	Asn	Gly	His	Leu	Ser	Ser
			180					185					190		
Ser	Glu	Leu	Ala	Gln	His	Val	Leu	Lys	Lys	Gln	Asp	Leu	Asp	Glu	Asp
			195				200					205			
Leu	Leu	Gly	Cys	Ser	Pro	Gly	Asp	Leu	Leu	Arg	Phe	Asp	Asp	Tyr	Asn
			210			215					220				
Ser	Asp	Ser	Ser	Leu	Thr	Leu	Arg	Glu	Phe	Tyr	Met	Ala	Phe	Gln	Val
				225		230				235					240
Val	Gln	Leu	Ser	Leu	Ala	Pro	Glu	Asp	Arg	Val	Ser	Val	Thr	Thr	Val
				245				250						255	
Thr	Val	Gly	Leu	Ser	Thr	Val	Leu	Thr	Cys	Ala	Val	His	Gly	Asp	Leu
			260					265					270		
Arg	Pro	Pro	Ile	Ile	Trp	Lys	Arg	Asn	Gly	Leu	Thr	Leu	Asn	Phe	Leu
			275				280					285			
Asp	Leu	Glu	Asp	Ile	Asn	Asp	Phe	Gly	Glu	Asp	Asp	Ser	Leu	Tyr	Ile
			290			295					300				
Thr	Lys	Val	Thr	Thr	Ile	His	Met	Gly	Asn	Tyr	Thr	Cys	His	Ala	Ser
			305			310				315					320
Gly	His	Glu	Gln	Leu	Phe	Gln	Thr	His	Val	Leu	Gln	Val	Asn	Val	Pro
				325					330					335	
Pro	Val	Ile	Arg	Val	Tyr	Pro	Glu	Ser	Gln	Ala	Gln	Glu	Pro	Gly	Val
				340				345					350		
Ala	Ala	Ser	Leu	Arg	Cys	His	Ala	Glu	Gly	Ile	Pro	Met	Pro	Arg	Ile

355	360	365
Thr Trp Leu Lys Asn Gly Val Asp Val Ser Thr Gln Met Ser Lys Gln		
370	375	380
Leu Ser Leu Leu Ala Asn Gly Ser Glu Leu His Ile Ser Ser Val Arg		
385	390	395
Tyr Glu Asp Thr Gly Ala Tyr Thr Cys Ile Ala Lys Asn Glu Val Gly		400
	405	410
Val Asp Glu Asp Ile Ser Ser Leu Phe Ile Glu Asp Ser Ala Arg Lys		415
	420	425
Thr Leu Ala Asn Ile Leu Trp Arg Glu Glu Gly Leu Ser Val Gly Asn		430
	435	440
Met Phe Tyr Val Phe Ser Asp Asp Gly Ile Ile Val Ile His Pro Val		445
	450	455
Asp Cys Glu Ile Gln Arg His Leu Lys Pro Thr Glu Lys Ile Phe Met		460
465	470	475
Ser Tyr Glu Glu Ile Cys Pro Gln Arg Glu Lys Asn Ala Thr Gln Pro		480
	485	490
Cys Gln Trp Val Ser Ala Val Asn Val Arg Asn Arg Tyr Ile Tyr Val		495
	500	505
Ala Gln Pro Ala Leu Ser Arg Val Leu Val Val Asp Ile Gln Ala His		510
	515	520
Lys Val Leu Gln Ser Ile Gly Val Asp Pro Leu Pro Ala Lys Leu Ser		525
530	535	540
Tyr Asp Lys Ser His Asp Gln Val Trp Val Leu Ser Trp Gly Asp Val		545
545	550	555
His Lys Ser Arg Pro Ser Leu Gln Val Ile Thr Glu Ala Ser Thr Gly		560
	565	570
Gln Ser Gln His Leu Ile Arg Thr Pro Phe Ala Gly Val Asp Asp Phe		575
	580	585
Phe Ile Pro Pro Thr Asn Leu Ile Ile Asn His Ile Arg Phe Gly Phe		590
	595	600
Ile Phe Asn Lys Ser Asp Pro Ala Val His Lys Val Asp Leu Glu Thr		605
	610	615
Met Met Pro Leu Lys Thr Ile Gly Leu His His His Gly Cys Val Pro		620
625	630	635
Gln Ala Met Ala His Thr His Leu Gly Gly Tyr Phe Phe Ile Gln Cys		640
	645	650
Arg Gln Asp Ser Pro Ala Ser Ala Ala Arg Gln Leu Leu Val Asp Ser		655
	660	665
Val Thr Asp Ser Val Leu Gly Pro Asn Gly Asp Val Thr Gly Thr Pro		670
	675	680
His Thr Ser Pro Asp Gly Arg Phe Ile Val Ser Ala Ala Asp Ser		685
	690	695
Pro Trp Leu His Val Gln Glu Ile Thr Val Arg Gly Glu Ile Gln Thr		700
705	710	715
Leu Tyr Asp Leu Gln Ile Asn Ser Gly Ile Ser Asp Leu Ala Phe Gln		720
	725	730
Arg Ser Phe Thr Glu Ser Asn Gln Tyr Asn Ile Tyr Ala Ala Leu His		735
	740	745
Thr Glu Pro Asp Leu Leu Phe Leu Glu Leu Ser Thr Gly Lys Val Gly		750
	755	760
Met Leu Lys Asn Leu Lys Glu Pro Pro Ala Gly Pro Ala Gln Pro Trp		765
	770	775
Gly Gly Thr His Arg Ile Met Arg Asp Ser Gly Leu Phe Gly Gln Tyr		780
785	790	795
Leu Leu Thr Pro Ala Arg Glu Ser Leu Phe Leu Ile Asn Gly Arg Gln		800
	805	810
Asn Thr Leu Arg Cys Glu Val Ser Gly Ile Lys Gly Gly Thr Thr Val		815
	820	825
Val Trp Val Gly Glu Val		830
835	838	

<210> 3152
 <211> 881
 <212> PRT
 <213> Homo sapiens

<400> 3152
 Gly Ala Gly Trp Gln Val Ser Leu Thr Gly Arg Trp Ser Pro Gly Arg
 1 5 10 15
 Glu Ala Gly Ala Gly Glu Val Arg Gln Asp Pro Gly Ser Thr Ala Ala
 20 25 30
 Ser Pro Ser Ser Cys Asp Ala Asp Leu Ser Ala Arg Met Ala Arg Gly
 35 40 45
 Glu Arg Arg Arg Arg Ala Val Pro Ala Glu Gly Val Arg Thr Ala Glu
 50 55 60
 Arg Ala Ala Arg Gly Gly Pro Gly Arg Arg Asp Gly Arg Gly Gly Gly
 65 70 75 80
 Pro Arg Ser Thr Ala Gly Gly Val Ala Leu Ala Val Val Val Leu Ser
 85 90 95
 Leu Ala Leu Gly Met Ser Gly Arg Trp Val Leu Ala Trp Tyr Arg Ala
 100 105 110
 Arg Arg Ala Val Thr Leu His Ser Ala Pro Ala Val Leu Pro Ala Asp
 115 120 125
 Ser Ser Ser Pro Ala Val Ala Pro Asp Leu Phe Trp Gly Thr Tyr Arg
 130 135 140
 Pro His Val Tyr Phe Gly Met Lys Thr Arg Ser Pro Lys Pro Leu Leu
 145 150 155 160
 Thr Gly Leu Met Trp Ala Gln Gln Gly Thr Thr Pro Gly Thr Pro Lys
 165 170 175
 Leu Arg His Thr Cys Glu Gln Gly Asp Gly Val Gly Pro Tyr Gly Trp
 180 185 190
 Glu Phe His Asp Gly Leu Ser Phe Gly Arg Gln His Ile Gln Asp Gly
 195 200 205
 Ala Leu Arg Leu Thr Thr Glu Phe Val Lys Arg Pro Gly Gly Gln His
 210 215 220
 Gly Gly Asp Trp Ser Trp Arg Val Thr Val Glu Pro Gln Asp Ser Gly
 225 230 235 240
 Thr Ser Ala Leu Pro Leu Val Ser Leu Phe Phe Tyr Val Val Thr Asp
 245 250 255
 Gly Lys Glu Val Leu Leu Pro Glu Val Gly Ala Lys Gly Gln Leu Lys
 260 265 270
 Phe Ile Ser Gly His Thr Ser Glu Leu Gly Asp Phe Arg Phe Thr Leu
 275 280 285
 Leu Pro Pro Thr Ser Pro Gly Asp Thr Ala Pro Lys Tyr Gly Ser Tyr
 290 295 300
 Asn Val Phe Trp Thr Ser Asn Pro Gly Leu Pro Leu Leu Thr Glu Met
 305 310 315 320
 Val Lys Ser Arg Leu Asn Ser Trp Phe Gln His Arg Pro Pro Gly Ala
 325 330 335
 Ser Pro Glu Arg Tyr Leu Gly Leu Pro Gly Ser Leu Lys Trp Glu Asp
 340 345 350
 Arg Gly Pro Ser Gly Gln Gly Gln Gly Gln Phe Leu Ile Gln Gln Val
 355 360 365
 Thr Leu Lys Ile Pro Ile Ser Ile Glu Phe Val Phe Glu Ser Gly Ser
 370 375 380
 Ala Gln Ala Gly Gly Asn Gln Ala Leu Pro Arg Leu Ala Gly Ser Leu
 385 390 395 400
 Leu Thr Gln Ala Leu Glu Ser His Ala Glu Gly Phe Arg Glu Arg Phe
 405 410 415
 Glu Lys Thr Phe Gln Leu Lys Glu Lys Gly Leu Ser Ser Gly Glu Gln
 420 425 430
 Val Leu Gly Gln Ala Ala Leu Ser Gly Leu Leu Gly Gly Ile Gly Tyr
 435 440 445
 Phe Tyr Gly Gln Gly Leu Val Leu Pro Asp Ile Gly Val Glu Gly Ser

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      450              455              460
Glu Gln Lys Val Asp Pro Ala Leu Phe Pro Pro Val Pro Leu Phe Thr
465              470              475              480
Ala Val Pro Ser Arg Ser Phe Phe Pro Arg Gly Phe Leu Trp Asp Glu
      485              490              495
Gly Phe His Gln Leu Val Val Gln Arg Trp Asp Pro Ser Leu Thr Arg
      500              505              510
Glu Ala Leu Gly His Trp Leu Gly Leu Leu Asn Ala Asp Gly Trp Ile
      515              520              525
Gly Arg Glu Gln Ile Leu Gly Asp Glu Ala Arg Ala Arg Val Pro Pro
      530              535              540
Glu Phe Leu Val Gln Arg Ala Val His Ala Asn Pro Pro Thr Leu Leu
545              550              555              560
Leu Pro Val Ala His Met Leu Glu Val Gly Asp Pro Asp Asp Leu Ala
      565              570              575
Phe Leu Arg Lys Ala Leu Pro Arg Leu His Ala Trp Phe Ser Trp Leu
      580              585              590
His Gln Ser Gln Ala Gly Pro Leu Pro Leu Ser Tyr Arg Trp Arg Gly
      595              600              605
Arg Asp Pro Ala Leu Pro Thr Leu Leu Asn Pro Lys Thr Leu Pro Ser
      610              615              620
Gly Leu Asp Asp Tyr Pro Arg Ala Ser His Pro Ser Val Thr Glu Arg
625              630              635              640
His Leu Asp Leu Arg Cys Trp Val Ala Leu Gly Ala Arg Val Leu Thr
      645              650              655
Arg Leu Ala Glu His Leu Gly Glu Ala Glu Val Ala Ala Glu Leu Gly
      660              665              670
Pro Leu Ala Ala Ser Leu Glu Ala Ala Glu Ser Leu Asp Glu Leu His
      675              680              685
Trp Ala Pro Glu Leu Gly Val Phe Ala Asp Phe Gly Asn His Thr Lys
      690              695              700
Ala Val Gln Leu Lys Pro Arg Pro Pro Gln Gly Leu Val Arg Val Val
705              710              715              720
Gly Arg Pro Gln Pro Gln Leu Gln Tyr Val Asp Ala Leu Gly Tyr Val
      725              730              735
Ser Leu Phe Pro Leu Leu Leu Arg Leu Leu Asp Pro Thr Ser Ser Arg
      740              745              750
Leu Gly Pro Leu Leu Asp Ile Leu Ala Asp Ser Arg His Leu Trp Ser
      755              760              765
Pro Phe Gly Leu Arg Ser Leu Ala Ala Ser Ser Ser Phe Tyr Gly Gln
      770              775              780
Arg Asn Ser Glu His Asp Pro Pro Tyr Trp Arg Gly Ala Val Trp Leu
785              790              795              800
Asn Val Asn Tyr Leu Ala Leu Gly Ala Leu His His Tyr Gly His Leu
      805              810              815
Glu Gly Pro His Gln Ala Arg Ala Ala Lys Leu His Gly Glu Leu Arg
      820              825              830
Ala Asn Val Val Gly Asn Val Trp Arg Gln Tyr Gln Ala Thr Gly Phe
      835              840              845
Leu Trp Glu Gln Tyr Ser Asp Arg Asp Gly Arg Gly Met Gly Cys Arg
      850              855              860
Pro Phe His Gly Trp Thr Ser Leu Val Leu Leu Ala Met Ala Glu Asp
865              870              875              880
Tyr
881

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<210> 3153
<211> 1437
<212> PRT
<213> Homo sapiens

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<400> 3153

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Met Val Ile Lys Thr Asp Glu Leu Pro Ala Ala Ala Pro Ala Asp Ser
 1           5           10           15
Ala Arg Glu His Gly Ser Gln Ala Gly Gly Lys Gly Arg Pro Gly Ala
          20           25           30
Ala Ala Val Leu Leu Ala Asp Leu Glu Arg Asp Ala Arg Gln Gly Glu
          35           40           45
Cys Ala Leu Pro Gly Ala Ala Met Ala Gly Leu Ala Pro Leu Lys Pro
 50           55           60
Glu Ala Ser Arg Ser Ser Ser Pro Gly Pro Thr Gly Cys Ile Arg Ala
 65           70           75           80
Arg Val Ala Ala Glu Ala Gly Thr Arg Asn Pro Gly Asn Ala Gly Ala
          85           90           95
Glu Leu Glu Ser Trp Leu Pro Cys Cys His Gly His Pro Glu Thr Pro
          100          105          110
Glu Pro Arg Gly Gly Gln Leu Pro Thr Ala Pro Glu Leu Pro Ser Val
          115          120          125
Met Leu Leu Asn Gly Asp Cys Pro Glu Ser Leu Lys Lys Glu Ala Ala
          130          135          140
Ala Ala Glu Pro Pro Arg Glu Asn Gly Leu Asp Glu Ala Gly Pro Gly
          145          150          155          160
Asp Glu Thr Thr Gly Gln Glu Val Ile Val Ile Gln Asp Thr Gly Phe
          165          170          175
Ser Val Lys Ile Leu Ala Pro Gly Ile Glu Pro Phe Ser Leu Gln Val
          180          185          190
Ser Pro Gln Glu Met Val Gln Glu Ile His Gln Val Leu Met Asp Arg
          195          200          205
Glu Asp Thr Cys His Arg Thr Cys Phe Ser Leu His Leu Asp Gly Asn
          210          215          220
Val Leu Asp His Phe Ser Glu Leu Arg Ser Val Glu Gly Leu Gln Glu
          225          230          235          240
Gly Ser Val Leu Arg Val Val Glu Glu Pro Tyr Thr Val Arg Glu Ala
          245          250          255
Arg Ile His Val Arg His Val Arg Asp Leu Leu Lys Ser Leu Asp Pro
          260          265          270
Ser Asp Ala Phe Asn Gly Val Asp Cys Asn Ser Leu Ser Phe Leu Ser
          275          280          285
Val Phe Thr Asp Gly Asp Leu Gly Asp Ser Gly Lys Arg Lys Lys Gly
          290          295          300
Leu Glu Met Asp Pro Ile Asp Cys Thr Pro Pro Glu Tyr Ile Leu Pro
          305          310          315          320
Gly Ser Arg Glu Arg Pro Leu Cys Pro Leu Gln Pro Gln Asn Arg Asp
          325          330          335
Trp Lys Pro Leu Gln Cys Leu Lys Val Leu Thr Met Ser Gly Trp Asn
          340          345          350
Pro Pro Pro Gly Asn Arg Lys Met His Gly Asp Leu Met Tyr Leu Phe
          355          360          365
Val Ile Thr Ala Glu Asp Arg Gln Val Ser Ile Thr Ala Ser Thr Arg
          370          375          380
Gly Phe Tyr Leu Asn Gln Ser Thr Ala Tyr His Phe Asn Pro Lys Pro
          385          390          395          400
Ala Ser Pro Arg Phe Leu Ser His Ser Leu Val Glu Leu Leu Asn Gln
          405          410          415
Ile Ser Pro Thr Phe Lys Lys Asn Phe Ala Val Leu Gln Lys Lys Arg
          420          425          430
Val Gln Arg His Pro Phe Glu Arg Ile Ala Thr Pro Phe Gln Val Tyr
          435          440          445
Ser Trp Thr Ala Pro Gln Ala Glu His Ala Met Asp Cys Val Arg Ala
          450          455          460
Glu Asp Ala Tyr Thr Ser Arg Leu Gly Tyr Glu Glu His Ile Pro Gly
          465          470          475          480
Gln Thr Arg Asp Trp Asn Glu Glu Leu Gln Thr Thr Arg Glu Leu Pro
          485          490          495
Arg Lys Asn Leu Pro Glu Arg Leu Leu Arg Glu Arg Ala Ile Phe Lys

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4843

1010	1015	1020
Asn Ile Cys Gln Glu Ala Lys Asn Tyr Phe Asp Phe Asp Leu Glu Cys		
1025	1030	1035
Glu Thr Val Asp Gln Ala Val Glu Thr Tyr Gly Leu Gln Lys Ile Thr		1040
	1045	1050
Leu Leu Arg Glu Ile Ser Leu Lys Thr Gly Ile Gln Val Leu Leu Lys		1055
	1060	1065
Glu Tyr Ser Phe Asp Ser Arg His Lys Pro Ala Phe Thr Glu Glu Asp		1070
	1075	1080
Val Leu Asn Ile Phe Pro Val Val Lys His Val Asn Pro Lys Ala Ser		1085
	1090	1095
Asp Ala Phe His Phe Phe Gln Ser Gly Gln Ala Lys Val Gln Gln Gly		1100
1105	1110	1115
Phe Leu Lys Glu Gly Cys Glu Leu Ile Asn Glu Ala Leu Asn Leu Phe		1120
	1125	1130
Asn Asn Val Tyr Gly Ala Met His Val Glu Thr Cys Ala Cys Leu Arg		1135
	1140	1145
Leu Leu Ala Arg Leu His Tyr Ile Met Gly Asp Tyr Ala Glu Ala Leu		1150
	1155	1160
Ser Asn Gln Gln Lys Ala Val Leu Met Ser Glu Arg Val Met Gly Thr		1165
	1170	1175
Glu His Pro Asn Thr Ile Gln Glu Tyr Met His Leu Ala Leu Tyr Cys		1180
1185	1190	1195
Phe Ala Ser Ser Gln Leu Ser Thr Ala Leu Ser Leu Leu Tyr Arg Ala		1200
	1205	1210
Arg Tyr Leu Met Leu Leu Val Phe Gly Glu Asp His Pro Glu Met Ala		1215
	1220	1225
Leu Leu Asp Asn Asn Ile Gly Leu Val Leu His Gly Val Met Glu Tyr		1230
	1235	1240
Asp Leu Ser Leu Arg Phe Leu Glu Asn Ala Leu Ala Val Ser Thr Lys		1245
	1250	1255
Tyr His Gly Pro Lys Ala Leu Lys Val Ala Leu Ser His His Leu Val		1260
1265	1270	1275
Ala Arg Val Tyr Glu Ser Lys Ala Glu Phe Arg Ser Ala Leu Gln His		1280
	1285	1290
Glu Lys Glu Gly Tyr Thr Ile Tyr Lys Thr Gln Leu Gly Glu Asp His		1295
	1300	1305
Glu Lys Thr Lys Glu Ser Ser Glu Tyr Leu Lys Cys Leu Thr Gln Gln		1310
	1315	1320
Ala Val Ala Leu Gln Arg Thr Met Asn Glu Ile Tyr Arg Asn Gly Ser		1325
	1330	1335
Ser Ala Asn Ile Pro Pro Leu Lys Phe Thr Ala Pro Ser Met Ala Ser		1340
1345	1350	1355
Val Leu Glu Gln Leu Asn Val Ile Asn Gly Ile Leu Phe Ile Pro Leu		1360
	1365	1370
Ser Gln Lys Asp Leu Glu Asn Leu Lys Ala Glu Val Ala Arg Arg His		1375
	1380	1385
Gln Leu Gln Glu Ala Ser Arg Asn Arg Asp Arg Ala Glu Glu Pro Met		1390
	1395	1400
Ala Thr Glu Pro Ala Pro Ala Gly Ala Pro Gly Asp Leu Gly Ser Gln		1405
	1410	1415
Pro Pro Ala Ala Lys Asp Pro Ser Pro Ser Val Gln Gly		1420
1425	1430	1435
		1437

<210> 3154

<211> 1222

<212> PRT

<213> Homo sapiens

<400> 3154

Lys Phe Lys Leu Ile Lys Ile Met Leu Leu Thr Leu Ile Ile Leu Leu

1	5	10	15
Pro Val Val Ser Lys Phe Ser Phe Val Ser Leu Ser Ala Pro Gln His			
20	25	30	
Trp Ser Cys Pro Glu Gly Thr Leu Ala Gly Asn Gly Asn Ser Thr Cys			
35	40	45	
Val Gly Pro Ala Pro Phe Leu Ile Phe Ser His Gly Asn Ser Ile Phe			
50	55	60	
Arg Ile Asp Thr Glu Gly Thr Asn Tyr Glu Gln Leu Val Val Asp Ala			
65	70	75	80
Gly Val Ser Val Ile Met Asp Phe His Tyr Asn Glu Lys Arg Ile Tyr			
85	90	95	
Trp Val Asp Leu Glu Arg Gln Leu Leu Gln Arg Val Phe Leu Asn Gly			
100	105	110	
Ser Arg Gln Glu Arg Val Cys Asn Ile Glu Lys Asn Val Ser Gly Met			
115	120	125	
Ala Ile Asn Trp Ile Asn Glu Glu Val Ile Trp Ser Asn Gln Gln Glu			
130	135	140	
Gly Ile Ile Thr Val Thr Asp Met Lys Gly Asn Asn Ser His Ile Leu			
145	150	155	160
Leu Ser Ala Leu Lys Tyr Pro Ala Asn Val Ala Val Asp Pro Val Glu			
165	170	175	
Arg Phe Ile Phe Trp Ser Ser Glu Val Ala Gly Ser Leu Tyr Arg Ala			
180	185	190	
Asp Leu Asp Gly Val Gly Val Lys Ala Leu Leu Glu Thr Ser Glu Lys			
195	200	205	
Ile Thr Ala Val Ser Leu Asp Val Leu Asp Lys Arg Leu Phe Trp Ile			
210	215	220	
Gln Tyr Asn Arg Glu Gly Ser Asn Ser Leu Ile Cys Ser Cys Asp Tyr			
225	230	235	240
Asp Gly Gly Ser Val His Ile Ser Lys His Pro Thr Gln His Asn Leu			
245	250	255	
Phe Ala Met Ser Leu Phe Gly Asp Arg Ile Phe Tyr Ser Thr Trp Lys			
260	265	270	
Met Lys Thr Ile Trp Ile Ala Asn Lys His Thr Gly Lys Asp Met Val			
275	280	285	
Arg Ile Asn Leu His Ser Ser Phe Val Pro Leu Gly Glu Leu Lys Val			
290	295	300	
Val His Pro Leu Ala Gln Pro Lys Ala Glu Asp Asp Thr Trp Glu Pro			
305	310	315	320
Glu Gln Lys Leu Cys Lys Leu Arg Lys Gly Asn Cys Ser Ser Thr Val			
325	330	335	
Cys Gly Gln Asp Leu Gln Ser His Leu Cys Met Cys Ala Glu Gly Tyr			
340	345	350	
Ala Leu Ser Arg Asp Arg Lys Tyr Cys Glu Gly Asn Asp Trp Lys Tyr			
355	360	365	
Cys Glu Asp Val Asn Glu Cys Ala Phe Trp Asn His Gly Cys Thr Leu			
370	375	380	
Gly Cys Lys Asn Thr Pro Gly Ser Tyr Tyr Cys Thr Cys Pro Val Gly			
385	390	395	400
Phe Val Leu Leu Pro Asp Gly Lys Arg Cys His Gln Leu Val Ser Cys			
405	410	415	
Pro Arg Asn Val Ser Glu Cys Ser His Asp Cys Val Leu Thr Ser Glu			
420	425	430	
Gly Pro Leu Cys Phe Cys Pro Glu Gly Ser Val Leu Glu Arg Asp Gly			
435	440	445	
Lys Thr Cys Ser Gly Cys Ser Ser Pro Asp Asn Gly Gly Cys Ser Gln			
450	455	460	
Leu Cys Val Pro Leu Ser Pro Val Ser Trp Glu Cys Asp Cys Phe Pro			
465	470	475	480
Gly Tyr Asp Leu Gln Leu Asp Glu Lys Ser Cys Ala Ala Ser Gly Pro			
485	490	495	
Gln Pro Phe Leu Leu Phe Ala Asn Ser Gln Asp Ile Arg His Met His			
500	505	510	
Phe Asp Gly Thr Asp Tyr Gly Thr Leu Leu Ser Gln Gln Met Gly Met			

515	520	525
Val Tyr Ala Leu Asp His	Asp Pro Val Glu Asn Lys	Ile Tyr Phe Ala
530	535	540
His Thr Ala Leu Lys Trp	Ile Glu Arg Ala Asn Met	Asp Gly Ser Gln
545	550	555
Arg Glu Arg Leu Ile Glu	Glu Gly Val Asp Val Pro	Glu Gly Leu Ala
565	570	575
Val Asp Trp Ile Gly Arg	Arg Phe Tyr Trp Thr Asp	Arg Gly Lys Ser
580	585	590
Leu Ile Gly Arg Ser Asp	Leu Asn Gly Lys Arg Ser	Lys Ile Ile Thr
595	600	605
Ile Glu Asn Ile Ser Gln	Pro Arg Gly Ile Ala Val	His Pro Met Ala
610	615	620
Lys Arg Leu Phe Trp Thr	Asp Thr Gly Ile Asn Pro	Arg Ile Glu Ser
625	630	635
Ser Ser Leu Gln Gly Leu	Gly Arg Leu Val Ile Ala	Ser Ser Asp Leu
645	650	655
Ile Trp Pro Ser Gly Ile	Thr Ile Asp Phe Leu Thr	Asp Lys Leu Tyr
660	665	670
Trp Cys Asp Ala Lys Gln	Ser Val Ile Glu Met Ala	Asn Leu Asp Gly
675	680	685
Ser Lys Arg Arg Arg Leu	Thr Gln Asn Asp Val Gly	His Pro Phe Ala
690	695	700
Val Ala Val Phe Glu Asp	Tyr Val Trp Phe Ser Asp	Trp Ala Met Pro
705	710	715
Ser Val Ile Arg Val Asn	Lys Arg Thr Gly Lys Asp	Arg Val Arg Leu
725	730	735
Gln Gly Ser Met Leu Lys	Pro Ser Ser Leu Val Val	Val His Pro Leu
740	745	750
Ala Lys Pro Gly Ala Asp	Pro Cys Leu Tyr Gln Asn	Gly Gly Cys Glu
755	760	765
His Ile Cys Lys Lys Arg	Leu Gly Thr Ala Trp Cys	Ser Cys Arg Glu
770	775	780
Gly Phe Met Lys Ala Ser	Asp Gly Lys Thr Cys Leu	Ala Leu Asp Gly
785	790	795
His Gln Leu Leu Ala Gly	Gly Glu Val Asp Leu Lys	Asn Gln Val Thr
805	810	815
Pro Leu Asp Ile Leu Ser	Lys Thr Arg Val Ser Glu	Asp Asn Ile Thr
820	825	830
Glu Ser Gln His Met Leu	Val Ala Glu Ile Met Val	Ser Asp Gln Asp
835	840	845
Asp Cys Ala Pro Val Gly	Cys Ser Met Tyr Ala Arg	Cys Ile Ser Glu
850	855	860
Gly Glu Asp Ala Thr Cys	Gln Cys Leu Lys Gly Phe	Ala Gly Asp Gly
865	870	875
Lys Leu Cys Ser Asp Ile	Asp Glu Cys Glu Met Gly	Val Pro Val Cys
885	890	895
Pro Pro Ala Ser Ser Lys	Cys Ile Asn Thr Glu Gly	Gly Tyr Val Cys
900	905	910
Arg Cys Ser Glu Gly Tyr	Gln Gly Asp Gly Ile His	Cys Leu Asp Ile
915	920	925
Asp Glu Cys Gln Leu Gly	Val His Ser Cys Gly Glu	Asn Ala Ser Cys
930	935	940
Thr Asn Thr Glu Gly Gly	Tyr Thr Cys Met Cys Ala	Gly Arg Leu Ser
945	950	955
Glu Pro Gly Leu Ile Cys	Pro Asp Ser Thr Pro Pro	Pro His Leu Arg
965	970	975
Glu Asp Asp His His Tyr	Ser Val Arg Asn Ser Asp	Ser Glu Cys Pro
980	985	990
Leu Ser His Asp Gly Tyr	Cys Leu His Asp Gly Val	Cys Met Tyr Ile
995	1000	1005
Glu Ala Leu Asp Lys Tyr	Ala Cys Asn Cys Val Val	Gly Tyr Ile Gly
1010	1015	1020
Glu Arg Cys Gln Tyr Arg	Asp Leu Lys Trp Trp Glu	Leu Arg His Ala

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<210> 3155
<211> 107
<212> PRT
<213> Homo sapiens
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<210> 3156
<211> 527
<212> PRT
<213> Homo sapiens
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4847

4848

<210> 3157
 <211> 199
 <212> PRT
 <213> Homo sapiens

<400> 3157
 Ser Ser Ala Met Gly Ser Arg Ser Ser His Ala Ala Val Ile Pro Asp
 1 5 10 15
 Gly Asp Ser Ile Arg Arg Glu Thr Gly Phe Ser Gln Ala Ser Leu Leu
 20 25 30
 Arg Leu His His Arg Phe Arg Ala Leu Asp Arg Asn Lys Lys Gly Tyr
 35 40 45
 Leu Ser Arg Met Asp Leu Gln Ile Gly Ala Leu Ala Val Asn Pro
 50 55 60
 Leu Gly Asp Arg Ile Ile Glu Ser Phe Phe Pro Asp Gly Ser Gln Arg
 65 70 75 80
 Val Asp Phe Pro Gly Phe Val Arg Val Leu Ala His Phe Arg Pro Val
 85 90 95
 Glu Asp Glu Asp Thr Glu Thr Gln Asp Pro Lys Lys Pro Glu Pro Leu
 100 105 110
 Asn Ser Arg Arg Asn Lys Leu His Tyr Ala Phe Gln Leu Tyr Asp Leu
 115 120 125
 Asp Arg Asp Gly Lys Ile Ser Arg His Glu Met Leu Gln Val Leu Arg
 130 135 140
 Leu Met Val Gly Val Gln Val Thr Glu Glu Gln Leu Glu Asn Ile Ala
 145 150 155 160
 Asp Arg Thr Val Gln Glu Ala Asp Glu Asp Gly Asp Gly Ala Val Ser
 165 170 175
 Phe Val Glu Phe Thr Lys Ser Leu Glu Lys Met Asp Val Glu His Lys
 180 185 190
 Met Ser Ile Arg Ile Leu Lys
 195 199

<210> 3158
 <211> 135
 <212> PRT
 <213> Homo sapiens

<400> 3158
 Ile Ser Ser Cys Pro His Thr Ala Tyr Glu Gly Ser Met Ser Thr Leu
 1 5 10 15
 Ser Asn Phe Thr Gln Thr Leu Glu Asp Val Phe Arg Arg Ile Phe Ile
 20 25 30
 Thr Tyr Met Asp Asn Trp Arg Gln Asn Thr Thr Ala Glu Gln Glu Ala
 35 40 45
 Leu Gln Ala Lys Val Asp Ala Glu Asn Phe Tyr Tyr Val Ile Leu Tyr
 50 55 60
 Leu Met Val Met Ile Gly Met Phe Ser Phe Ile Ile Val Ala Ile Leu
 65 70 75 80
 Val Ser Thr Val Lys Ser Lys Arg Arg Glu His Ser Asn Asp Pro Tyr
 85 90 95
 His Gln Tyr Ile Val Glu Asp Trp Gln Glu Lys Tyr Lys Ser Gln Ile
 100 105 110
 Leu Asn Leu Glu Glu Ser Lys Ala Thr Ile His Glu Asn Ile Gly Ala
 115 120 125
 Ala Gly Phe Lys Met Ser Pro
 130 135

<210> 3159
 <211> 137
 <212> PRT
 <213> Homo sapiens

<400> 3159
 Pro Trp Gly Ala Ala Glu Leu Asp Met Gly Arg Arg Asp Ala Gln Leu
 1 5 10 15
 Leu Ala Ala Leu Leu Val Leu Gly Leu Cys Ala Leu Ala Gly Ser Glu
 20 25 30
 Lys Pro Ser Pro Cys Gln Cys Ser Arg Leu Ser Pro His Asn Arg Thr
 35 40 45
 Asn Cys Gly Phe Pro Gly Ile Thr Ser Asp Gln Cys Phe Asp Asn Gly
 50 55 60
 Cys Cys Phe Asp Ser Ser Val Thr Gly Val Pro Trp Cys Phe His Pro
 65 70 75 80
 Leu Pro Lys Gln Glu Ser Asp Gln Cys Val Met Glu Val Ser Asp Arg
 85 90 95
 Arg Asn Cys Gly Tyr Pro Gly Ile Ser Pro Glu Glu Cys Ala Ser Arg
 100 105 110
 Lys Cys Cys Phe Ser Asn Phe Ile Phe Glu Val Pro Trp Cys Phe Phe
 115 120 125
 Pro Lys Ser Val Glu Asp Cys His Tyr
 130 135 137

<210> 3160
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 3160
 Lys Pro Lys Thr Lys Ile Leu Lys Met Val Tyr Tyr Pro Glu Leu Phe
 1 5 10 15
 Val Trp Val Ser Gln Glu Pro Phe Pro Asn Lys Asp Met Glu Gly Arg
 20 25 30
 Leu Pro Lys Gly Arg Leu Pro Val Pro Lys Glu Val Asn Arg Lys Lys
 35 40 45
 Asn Asp Glu Thr Asn Ala Ala Ser Leu Thr Pro Leu Gly Ser Ser Glu
 50 55 60
 Leu Arg Ser Pro Arg Ile Ser Tyr Leu His Phe Phe
 65 70 75 76

<210> 3161
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 3161
 Leu Ser Ser Thr Gly Gly Leu His Ala Ala Ala Cys Ala Ala Ala Met
 1 5 10 15
 Ser Leu Val Ile Pro Glu Lys Phe Gln His Ile Leu Arg Val Leu Asn
 20 25 30
 Thr Asn Ile Asp Gly Arg Arg Lys Ile Ala Phe Ala Ile Thr Ala Ile
 35 40 45
 Lys Gly Val Gly Arg Arg Tyr Ala His Val Val Leu Arg Lys Ala Asp
 50 55 60
 Ile Asp Leu Thr Lys Arg Ala Gly Glu Leu Thr Glu Asp Glu Val Glu

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65          70          75          80
Arg Val Ile Thr Ile Met Gln Asn Pro Arg Gln Tyr Lys Ile Pro Asp
85          90          95
Trp Phe Leu Asn Arg Gln Lys Asp Val Lys Asp Gly Lys Tyr Ser Gln
100        105        110
Val Leu Ala Asn Gly Leu Asp Asn Lys Leu Arg Glu Asp Leu Glu Arg
115        120        125
Leu Lys Lys Ile Arg Ala His Arg Gly Leu Arg His Phe Trp Gly Leu
130        135        140
Arg Val Arg Gly Gln His Thr Lys Thr Thr Gly Arg Arg Gly Arg Thr
145        150        155        160
Val Gly Val Ser Lys Lys Lys
165        167

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<210> 3162
 <211> 646
 <212> PRT
 <213> Homo sapiens

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<400> 3162
Gly Met Pro Arg Ser Arg Gly Gly Arg Ala Ala Pro Gly Pro Pro Pro
1          5          10          15
Pro Pro Pro Pro Pro Gly Gln Ala Pro Arg Trp Ser Arg Trp Arg Val
20        25        30
Pro Gly Arg Leu Leu Leu Leu Leu Pro Ala Leu Cys Cys Leu Pro
35        40        45
Gly Ala Ala Arg Ala Ala Ala Ala Ala Ala Gly Ala Gly Asn Arg Ala
50        55        60
Ala Val Ala Val Ala Val Ala Arg Ala Asp Glu Ala Glu Ala Pro Phe
65        70        75        80
Ala Gly Gln Asn Trp Leu Lys Ser Tyr Gly Tyr Leu Leu Pro Tyr Asp
85        90        95
Ser Arg Ala Ser Ala Leu His Ser Ala Lys Ala Leu Gln Ser Ala Val
100       105       110
Ser Thr Met Gln Gln Phe Tyr Gly Ile Pro Val Thr Gly Val Leu Asp
115       120       125
Gln Thr Thr Ile Glu Trp Met Lys Lys Pro Arg Cys Gly Val Pro Asp
130       135       140
His Pro His Leu Ser Arg Arg Arg Asn Lys Arg Tyr Ala Leu Thr
145       150       155       160
Gly Gln Lys Trp Arg Gln Lys His Ile Thr Tyr Ser Ile His Asn Tyr
165       170       175
Thr Pro Lys Val Gly Glu Leu Asp Thr Arg Lys Ala Ile Arg Gln Ala
180       185       190
Phe Asp Val Trp Gln Lys Val Thr Pro Leu Thr Phe Glu Glu Val Pro
195       200       205
Tyr His Glu Ile Lys Ser Asp Arg Lys Glu Ala Asp Ile Met Ile Phe
210       215       220
Phe Ala Ser Gly Phe His Gly Asp Ser Ser Pro Phe Asp Gly Glu Gly
225       230       235       240
Gly Phe Leu Ala His Ala Tyr Phe Pro Gly Pro Gly Ile Gly Gly Asp
245       250       255
Thr His Phe Asp Ser Asp Glu Pro Trp Thr Leu Gly Asn Ala Asn His
260       265       270
Asp Gly Asn Asp Leu Phe Leu Val Ala Val His Glu Leu Gly His Ala
275       280       285
Leu Gly Leu Glu His Ser Ser Asp Pro Ser Ala Ile Met Ala Pro Phe
290       295       300
Tyr Gln Tyr Met Glu Thr His Asn Phe Lys Leu Pro Gln Asp Asp Leu
305       310       315       320
Gln Gly Ile Gln Lys Ile Tyr Gly Pro Pro Ala Glu Pro Leu Glu Pro

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          325          330          335
Thr Arg Pro Leu Pro Thr Leu Pro Val Arg Arg Ile His Ser Pro Ser
          340          345          350
Glu Arg Lys His Glu Arg Gln Pro Arg Pro Pro Arg Pro Pro Leu Gly
          355          360          365
Asp Arg Pro Ser Thr Pro Gly Thr Lys Pro Asn Ile Cys Asp Gly Asn
          370          375          380
Phe Asn Thr Val Ala Leu Phe Arg Gly Glu Met Phe Val Phe Lys Asp
          385          390          395          400
Arg Trp Phe Trp Arg Leu Arg Asn Asn Arg Val Gln Glu Gly Tyr Pro
          405          410          415
Met Gln Ile Glu Gln Phe Trp Lys Gly Leu Pro Ala Arg Ile Asp Ala
          420          425          430
Ala Tyr Glu Arg Ala Asp Gly Arg Phe Val Phe Phe Lys Gly Asp Lys
          435          440          445
Tyr Trp Val Phe Lys Glu Val Thr Val Glu Pro Gly Tyr Pro His Ser
          450          455          460
Leu Gly Glu Leu Gly Ser Cys Leu Pro Arg Glu Gly Ile Asp Thr Ala
          465          470          475          480
Leu Arg Trp Glu Pro Val Gly Lys Thr Tyr Phe Phe Lys Gly Glu Arg
          485          490          495
Tyr Trp Arg Tyr Ser Glu Glu Arg Arg Ala Thr Asp Pro Gly Tyr Pro
          500          505          510
Lys Pro Ile Thr Val Trp Lys Gly Ile Pro Gln Ala Pro Gln Gly Ala
          515          520          525
Phe Ile Ser Lys Glu Gly Tyr Tyr Thr Tyr Phe Tyr Lys Gly Arg Asp
          530          535          540
Tyr Trp Lys Phe Asp Asn Gln Lys Leu Ser Val Glu Pro Gly Tyr Pro
          545          550          555          560
Arg Asn Ile Leu Arg Asp Trp Met Gly Cys Asn Gln Lys Glu Val Glu
          565          570          575
Arg Arg Lys Glu Arg Arg Leu Pro Gln Asp Asp Val Asp Ile Met Val
          580          585          590
Thr Ile Asn Asp Val Pro Gly Ser Val Asn Ala Val Ala Val Val Ile
          595          600          605
Pro Cys Ile Leu Ser Leu Cys Ile Leu Val Leu Val Tyr Thr Ile Phe
          610          615          620
Gln Phe Lys Asn Lys Thr Gly Pro Gln Pro Val Thr Tyr Tyr Lys Arg
          625          630          635          640
Pro Val Gln Glu Trp Val
          645 646

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<210> 3163
 <211> 329
 <212> PRT
 <213> Homo sapiens

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    <400> 3163
Ser Arg Leu Ser Leu Gln Phe Tyr Val Ser Phe Arg Arg Thr Gly Leu
  1          5          10          15
Phe Thr Cys Lys Leu Ile Val Glu Ile Phe Phe Arg Asn Tyr Met Asn
          20          25          30
Asp Ser Leu Arg Thr Asn Val Phe Val Arg Phe Gln Pro Glu Thr Ile
          35          40          45
Ala Cys Ala Cys Ile Tyr Leu Ala Ala Arg Ala Leu Gln Ile Pro Leu
          50          55          60
Pro Thr Arg Pro His Trp Phe Leu Leu Phe Gly Thr Thr Glu Glu Glu
          65          70          75          80
Ile Gln Glu Ile Cys Ile Glu Thr Leu Arg Leu Tyr Thr Arg Lys Lys
          85          90          95
Pro Asn Tyr Glu Leu Leu Glu Lys Glu Val Glu Lys Arg Lys Val Ala

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100	105	110
Leu Gln Glu Ala Lys Leu Lys Ala Lys Gly Leu Asn Pro Asp Gly Thr		
115	120	125
Pro Ala Leu Ser Thr Leu Gly Gly Phe Ser Pro Ala Ser Lys Pro Ser		
130	135	140
Ser Pro Arg Glu Val Lys Ala Glu Glu Lys Ser Pro Ile Ser Ile Asn		
145	150	155
Val Lys Thr Val Lys Lys Glu Pro Glu Asp Arg Gln Gln Ala Ser Lys		
165	170	175
Ser Pro Tyr Asn Gly Val Arg Lys Asp Ser Lys Arg Ser Arg Asn Ser		
180	185	190
Arg Ser Ala Ser Arg Ser Arg Ser Arg Thr Arg Ser Arg Ser Arg Ser		
195	200	205
His Thr Pro Arg Arg His Tyr Asn Asn Arg Arg Ser Arg Ser Gly Thr		
210	215	220
Tyr Ser Ser Arg Ser Arg Ser Arg Ser Arg Ser His Ser Glu Ser Pro		
225	230	235
Arg Arg His His Asn His Gly Ser Pro His Leu Lys Ala Lys His Thr		
245	250	255
Arg Asp Asp Leu Lys Ser Ser Asn Arg His Gly His Lys Arg Lys Lys		
260	265	270
Ser Arg Ser Arg Ser Gln Ser Lys Ser Arg Asp His Ser Asp Ala Ala		
275	280	285
Lys Lys His Arg His Glu Arg Gly His His Arg Asp Arg Arg Glu Arg		
290	295	300
Ser Arg Ser Phe Glu Arg Ser His Lys Ser Lys His His Gly Gly Ser		
305	310	315
Arg Ser Gly His Gly Arg His Arg Arg		
325	329	

<210> 3164
 <211> 1090
 <212> PRT
 <213> Homo sapiens

<400> 3164

Asp Cys Arg Leu Gln Ala Ala Met Pro Thr Asn Phe Thr Val Val Pro		
1	5	10
Val Glu Ala His Ala Asp Gly Gly Gly Asp Glu Thr Ala Glu Arg Thr		
20	25	30
Glu Ala Pro Gly Thr Pro Glu Gly Pro Glu Pro Glu Arg Pro Ser Pro		
35	40	45
Gly Asp Gly Asn Pro Arg Glu Asn Ser Pro Phe Leu Asn Asn Val Glu		
50	55	60
Val Glu Gln Glu Ser Phe Glu Gly Lys Asn Met Ala Leu Phe Glu		
65	70	75
Glu Glu Met Asp Ser Asn Pro Met Val Ser Ser Leu Leu Asn Lys Leu		
85	90	95
Ala Asn Tyr Thr Asn Leu Ser Gln Gly Val Val Glu His Glu Glu Asp		
100	105	110
Glu Glu Ser Arg Arg Arg Glu Ala Lys Ala Pro Arg Met Gly Thr Phe		
115	120	125
Ile Gly Val Tyr Leu Pro Cys Leu Gln Asn Ile Leu Gly Val Ile Leu		
130	135	140
Phe Leu Arg Leu Thr Trp Ile Val Gly Val Ala Gly Val Leu Glu Ser		
145	150	155
Phe Leu Ile Val Ala Met Cys Cys Thr Cys Thr Met Leu Thr Ala Ile		
165	170	175
Ser Met Ser Ala Ile Ala Thr Asn Gly Val Val Pro Ala Gly Gly Ser		
180	185	190
Tyr Tyr Met Ile Ser Arg Ser Leu Gly Pro Glu Phe Gly Gly Ala Val		

					195						200						205
Gly	Leu	Cys	Phe	Tyr	Leu	Gly	Thr	Thr	Phe	Ala	Gly	Ala	Met	Tyr	Ile		
					210						215						220
Leu	Gly	Thr	Ile	Glu	Ile	Phe	Leu	Thr	Tyr	Ile	Ser	Pro	Gly	Ala	Ala		
					225						230						235
Ile	Phe	Gln	Ala	Glu	Ala	Ala	Gly	Gly	Glu	Ala	Ala	Ala	Met	Leu	His		
					245						250						255
Asn	Met	Arg	Val	Tyr	Gly	Thr	Cys	Thr	Leu	Val	Leu	Met	Ala	Leu	Val		
					260						265						270
Val	Phe	Val	Gly	Val	Lys	Tyr	Val	Asn	Lys	Leu	Ala	Leu	Val	Phe	Leu		
					275						280						285
Ala	Cys	Val	Val	Leu	Ser	Ile	Leu	Ala	Ile	Tyr	Ala	Gly	Val	Ile	Lys		
					290						295						300
Ser	Ala	Phe	Asp	Pro	Pro	Asp	Ile	Pro	Val	Cys	Leu	Leu	Gly	Asn	Arg		
					305						310						315
Thr	Leu	Ser	Arg	Arg	Ser	Phe	Asp	Ala	Cys	Val	Lys	Ala	Tyr	Gly	Ile		
					325						330						335
His	Asn	Asn	Ser	Ala	Thr	Ser	Ala	Leu	Trp	Gly	Leu	Phe	Cys	Asn	Gly		
					340						345						350
Ser	Gln	Pro	Ser	Ala	Ala	Cys	Asp	Glu	Tyr	Phe	Ile	Gln	Asn	Asn	Val		
					355						360						365
Thr	Glu	Ile	Gln	Gly	Ile	Pro	Gly	Ala	Ala	Ser	Gly	Val	Phe	Leu	Glu		
					370						375						380
Asn	Leu	Trp	Ser	Thr	Tyr	Ala	His	Ala	Gly	Ala	Phe	Val	Glu	Lys	Lys		
					385						390						395
Gly	Val	Pro	Ser	Val	Pro	Val	Ala	Glu	Glu	Ser	Arg	Ala	Ser	Thr	Leu		
					405						410						415
Pro	Tyr	Val	Leu	Thr	Asp	Ile	Ala	Ala	Ser	Phe	Thr	Leu	Leu	Val	Gly		
					420						425						430
Ile	Tyr	Phe	Pro	Ser	Val	Thr	Gly	Ile	Met	Ala	Gly	Ser	Asn	Arg	Ser		
					435						440						445
Gly	Asp	Leu	Lys	Asp	Ala	Gln	Lys	Ser	Ile	Pro	Thr	Gly	Thr	Ile	Leu		
					450						455						460
Ala	Ile	Val	Thr	Thr	Ser	Phe	Ile	Tyr	Leu	Ser	Cys	Ile	Val	Leu	Phe		
					465						470						475
Gly	Ala	Cys	Ile	Glu	Gly	Val	Val	Leu	Arg	Asp	Lys	Phe	Gly	Glu	Ala		
					485						490						495
Leu	Gln	Gly	Asn	Leu	Val	Ile	Gly	Met	Leu	Ala	Trp	Pro	Ser	Pro	Trp		
					500						505						510
Val	Ile	Val	Ile	Gly	Ser	Phe	Phe	Ser	Thr	Cys	Gly	Ala	Gly	Leu	Gln		
					515						520						525
Thr	Leu	Thr	Gly	Ala	Pro	Arg	Leu	Leu	Gln	Ala	Ile	Ala	Arg	Asp	Gly		
					530						535						540
Ile	Val	Pro	Phe	Leu	Gln	Val	Phe	Gly	His	Gly	Lys	Ala	Asn	Gly	Glu		
					545						550						555
Pro	Thr	Trp	Ala	Leu	Leu	Leu	Thr	Val	Leu	Ile	Cys	Glu	Thr	Gly	Ile		
					565						570						575
Leu	Ile	Ala	Ser	Leu	Asp	Ser	Val	Ala	Pro	Ile	Leu	Ser	Met	Phe	Phe		
					580						585						590
Leu	Met	Cys	Tyr	Leu	Phe	Val	Asn	Leu	Ala	Cys	Ala	Val	Gln	Thr	Leu		
					595						600						605
Leu	Arg	Thr	Pro	Asn	Trp	Arg	Pro	Arg	Phe	Lys	Phe	Tyr	His	Trp	Thr		
					610						615						620
Leu	Ser	Phe	Leu	Gly	Met	Ser	Leu	Cys	Leu	Ala	Leu	Met	Phe	Ile	Cys		
					625						630						635
Ser	Trp	Tyr	Tyr	Ala	Leu	Ser	Ala	Met	Leu	Ile	Ala	Gly	Cys	Ile	Tyr		
					645						650						655
Lys	Tyr	Ile	Glu	Tyr	Arg	Gly	Ala	Glu	Lys	Glu	Trp	Gly	Asp	Gly	Ile		
					660						665						670
Arg	Gly	Leu	Ser	Leu	Asn	Ala	Ala	Arg	Tyr	Ala	Leu	Leu	Arg	Val	Glu		
					675						680						685
His	Gly	Pro	Pro	His	Thr	Lys	Asn	Trp	Arg	Pro	Gln	Val	Leu	Val	Met		
					690						695						700
Leu	Asn	Leu	Asp	Ala	Glu	Gln	Ala	Met	Lys	His	Pro	Arg	Leu	Leu	Ser		

705 710 715 720
 Phe Thr Ser Gln Leu Lys Ala Gly Lys Gly Leu Thr Ile Val Gly Ser
 725 730 735
 Val Leu Glu Gly Thr Tyr Leu Asp Lys His Met Glu Ala Gln Arg Ala
 740 745 750
 Glu Glu Asn Ile Arg Ser Leu Met Ser Thr Glu Lys Thr Lys Gly Phe
 755 760 765
 Cys Gln Leu Val Val Ser Ser Ser Leu Arg Asp Gly Met Ser His Leu
 770 775 780
 Ile Gln Ser Ala Gly Leu Gly Gly Leu Lys His Asn Thr Val Leu Met
 785 790 795 800
 Ala Trp Pro Ala Ser Trp Lys Gln Glu Asp Asn Pro Phe Ser Trp Lys
 805 810 815
 Asn Phe Val Asp Thr Val Arg Asp Thr Thr Ala Ala His Gln Ala Leu
 820 825 830
 Leu Val Ala Lys Asn Val Asp Ser Phe Pro Gln Asn Gln Glu Arg Phe
 835 840 845
 Gly Gly Gly His Ile Asp Val Trp Trp Ile Val His Asp Gly Gly Met
 850 855 860
 Leu Met Leu Leu Pro Phe Leu Leu Arg Gln His Lys Val Trp Arg Lys
 865 870 875 880
 Cys Arg Met Arg Ile Phe Thr Val Ala Gln Val Asp Asp Asn Ser Ile
 885 890 895
 Gln Met Lys Lys Asp Leu Gln Met Phe Leu Tyr His Leu Arg Ile Ser
 900 905 910
 Ala Glu Val Glu Val Val Glu Met Val Glu Asn Asp Ile Ser Ala Phe
 915 920 925
 Thr Tyr Glu Arg Thr Leu Met Met Glu Gln Arg Ser Gln Met Leu Lys
 930 935 940
 Gln Met Gln Leu Ser Lys Asn Glu Gln Glu Arg Glu Ala Gln Leu Ile
 945 950 955 960
 His Asp Arg Asn Thr Ala Ser His Thr Ala Ala Ala Ala Arg Thr Gln
 965 970 975
 Ala Pro Pro Thr Pro Asp Lys Val Gln Met Thr Trp Thr Arg Glu Lys
 980 985 990
 Leu Ile Ala Glu Lys Tyr Arg Ser Arg Asp Thr Ser Leu Ser Gly Phe
 995 1000 1005
 Lys Asp Leu Phe Ser Met Lys Pro Asp Gln Ser Asn Val Arg Arg Met
 1010 1015 1020
 His Thr Ala Val Lys Leu Asn Gly Val Val Leu Asn Lys Ser Gln Asp
 1025 1030 1035 1040
 Ala Gln Leu Val Leu Asn Met Pro Gly Pro Pro Lys Asn Arg Gln
 1045 1050 1055
 Gly Asp Glu Asn Tyr Met Glu Phe Leu Glu Val Leu Thr Glu Gly Leu
 1060 1065 1070
 Asn Arg Val Leu Leu Val Arg Gly Gly Gly Arg Glu Val Ile Thr Ile
 1075 1080 1085
 Tyr Ser
 1090

<210> 3165
 <211> 893
 <212> PRT
 <213> Homo sapiens

<400> 3165
 Gly Arg Gly Ala Arg Gly Gly Ser Gly Ala Gly Ala Leu Arg Gly Cys
 1 5 10 15
 Arg Gly Tyr Leu Gln Lys Leu Ser Gly Lys Gly Pro Ser Arg Gly Tyr
 20 25 30
 Arg Ser Arg Trp Phe Val Phe Asp Ala Arg Arg Cys Tyr Leu Tyr Tyr

4856

545					550					555				560	
Glu	Gln	Ala	Phe	Val	Lys	Pro	His	Leu	Val	Ser	Glu	Tyr	Asp	Ile	Tyr
				565					570					575	
Gly	Phe	Arg	Thr	Val	Pro	Glu	Asp	Asp	Glu	Glu	Glu	Lys	Leu	Val	Ala
			580					585					590		
Lys	Val	Arg	Ala	Leu	Asp	Leu	Lys	Thr	Leu	Tyr	Leu	Thr	Glu	Asn	Gln
		595					600					605			
Glu	Val	Ser	Thr	Gly	Val	Lys	Trp	Glu	Asn	Tyr	Phe	Ala	Ser	Thr	Val
	610					615					620				
Asn	Arg	Glu	Met	Met	Cys	Ser	Pro	Glu	Leu	Lys	Asn	Leu	Ile	Arg	Ala
	625				630					635				640	
Gly	Ile	Pro	His	Glu	His	Arg	Ser	Lys	Val	Trp	Lys	Trp	Cys	Val	Asp
			645						650					655	
Arg	His	Thr	Arg	Lys	Phe	Lys	Asp	Asn	Thr	Glu	Pro	Gly	His	Phe	Gln
			660					665					670		
Thr	Leu	Leu	Gln	Lys	Ala	Leu	Glu	Lys	Gln	Asn	Pro	Ala	Ser	Lys	Gln
		675					680					685			
Ile	Glu	Leu	Asp	Leu	Leu	Arg	Thr	Leu	Pro	Asn	Asn	Lys	His	Tyr	Ser
	690					695					700				
Cys	Pro	Thr	Ser	Glu	Gly	Ile	Gln	Lys	Leu	Arg	Asn	Val	Leu	Leu	Ala
	705				710					715				720	
Phe	Ser	Trp	Arg	Asn	Pro	Asp	Ile	Gly	Tyr	Cys	Gln	Gly	Leu	Asn	Arg
			725					730					735		
Leu	Val	Ala	Val	Ala	Leu	Leu	Tyr	Leu	Glu	Gln	Glu	Asp	Ala	Phe	Trp
		740					745					750			
Cys	Leu	Val	Thr	Ile	Val	Glu	Val	Phe	Met	Pro	Arg	Asp	Tyr	Tyr	Thr
	755					760					765				
Lys	Thr	Leu	Leu	Gly	Ser	Gln	Val	Asp	Gln	Arg	Val	Phe	Arg	Asp	Leu
	770					775					780				
Met	Ser	Glu	Lys	Leu	Pro	Arg	Leu	His	Gly	His	Phe	Glu	Gln	Tyr	Lys
	785				790				795					800	
Val	Asp	Tyr	Thr	Leu	Ile	Thr	Phe	Asn	Trp	Phe	Leu	Val	Val	Phe	Val
			805					810						815	
Asp	Ser	Val	Val	Ser	Asp	Ile	Leu	Phe	Lys	Ile	Trp	Asp	Ser	Phe	Leu
			820					825					830		
Tyr	Glu	Gly	Pro	Lys	Val	Ile	Phe	Arg	Phe	Ala	Leu	Ala	Leu	Phe	Lys
		835				840					845				
Tyr	Lys	Glu	Glu	Glu	Ile	Leu	Lys	Leu	Gln	Asp	Ser	Met	Ser	Ile	Phe
	850					855				860					
Lys	Tyr	Leu	Arg	Tyr	Phe	Thr	Arg	Thr	Ile	Leu	Asp	Ala	Arg	Ser	Gly
	865				870					875				880	
Thr	Asp	Ala	Pro	Thr	Thr	Trp	Arg	Lys	Ser	Gly	Trp	Ser			
			885					890				893			

<210> 3166
 <211> 1353
 <212> PRT
 <213> Homo sapiens

<400> 3166
 Phe Pro Gly Pro Thr Ile Ser Ser Asn Ser Gln Leu Tyr Arg Ala Ser
 1 5 10 15
 Ala Leu Phe Glu Thr Ile Arg His Glu Ala Gln Leu Ser Thr Asp Tyr
 20 25 30
 Lys Leu Ser Leu Phe Asp Leu Gln Thr Ser Ser Tyr Gln Ala Leu Gln
 35 40 45
 Arg Val Leu Val Ser Leu Gly His His Asp Glu Ala Leu Ala Val Ala
 50 55 60
 Glu Arg Gly Arg Thr Arg Ala Phe Ala Asp Leu Leu Val Glu Arg Gln
 65 70 75 80
 Thr Gly Gln Gln Asp Ser Asp Pro Tyr Ser Pro Val Thr Ile Asp Gln

4858

595	600	605
Arg Ala Arg Asp Ala Leu	Arg Val Leu Leu His Leu	Val Glu Lys Ser
610	615	620
Leu Gln Arg Ile Gln Asn Gly	Gln Arg Asn Ala Met Tyr Thr Ser Gln	
625	630	635
Gln Ser Val Glu Asn Lys Val Gly Gly Ile Pro Gly Trp Gln Ala Leu		640
	645	650
Leu Thr Ala Val Gly Phe Arg Leu Asp Pro Pro Thr Ser Gly Leu Pro		655
	660	665
Ala Ala Val Phe Phe Pro Thr Ser Asp Pro Gly Asp Arg Leu Gln Gln		670
	675	680
Cys Ser Ser Thr Leu Gln Ser Leu Leu Gly Leu Pro Asn Pro Ala Leu		685
	690	695
Gln Ala Leu Cys Lys Leu Ile Thr Ala Ser Glu Thr Gly Glu Gln Leu		700
705	710	715
Ile Ser Arg Ala Val Lys Asn Met Val Gly Met Leu His Gln Val Leu		720
	725	730
Val Gln Leu Gln Ala Gly Glu Lys Glu Gln Asp Leu Ala Ser Ala Pro		735
	740	745
Ile Gln Val Ser Ile Ser Val Gln Leu Trp Arg Leu Pro Gly Cys His		750
	755	760
Glu Phe Leu Ala Ala Leu Gly Phe Val Leu Cys Glu Val Gly Gln Glu		765
	770	775
Glu Val Ile Leu Lys Thr Gly Lys Gln Ala Asn Arg Arg Thr Val His		780
785	790	795
Phe Ala Leu Gln Ser Leu Leu Ser Leu Phe Asp Ser Thr Glu Leu Pro		800
	805	810
Lys Arg Leu Ser Leu Asp Ser Ser Ser Ser Leu Glu Ser Leu Ala Ser		815
	820	825
Ala Gln Ser Val Ser Asn Ala Leu Pro Leu Gly Tyr Gln Gln Pro Pro		830
	835	840
Phe Ser Pro Thr Gly Ala Asp Ser Ile Ala Ser Asp Ala Ile Ser Val		845
	850	855
Tyr Ser Leu Ser Ser Ile Ala Ser Ser Met Ser Phe Val Ser Lys Pro		860
865	870	875
Glu Gly Gly Ser Glu Gly Gly Gly Pro Gly Gly Arg Gln Asp His Asp		880
	885	890
Arg Ser Lys Asn Ala Tyr Leu Gln Arg Ser Thr Leu Pro Arg Ser Gln		895
	900	905
Leu Pro Pro Gln Thr Arg Pro Ala Gly Asn Lys Asp Glu Glu Glu Tyr		910
	915	920
Glu Gly Phe Ser Ile Ile Ser Asn Glu Pro Leu Ala Thr Tyr Gln Glu		925
	930	935
Asn Arg Asn Thr Cys Phe Ser Pro Asp His Lys Gln Pro Gln Pro Gly		940
945	950	955
Thr Ala Gly Gly Met Arg Val Ser Val Ser Ser Lys Gly Ser Ile Ser		960
	965	970
Thr Pro Asn Ser Pro Val Lys Met Thr Leu Ile Pro Ser Pro Asn Ser		975
	980	985
Pro Phe Gln Lys Val Gly Lys Leu Ala Ser Ser Asp Thr Gly Glu Ser		990
	995	1000
Asp Gln Ser Ser Thr Glu Thr Asp Ser Thr Val Lys Ser Gln Glu Glu		1005
	1010	1015
Ser Asn Pro Lys Leu Asp Pro Gln Glu Leu Ala Gln Lys Ile Leu Glu		1020
1025	1030	1035
Glu Thr Gln Ser His Leu Ile Ala Val Glu Arg Leu Gln Arg Ser Gly		1040
	1045	1050
Gly Gln Val Ser Lys Ser Asn Asn Pro Glu Asp Gly Val Gln Ala Pro		1055
	1060	1065
Ser Ser Thr Ala Val Phe Arg Ala Ser Glu Thr Ser Ala Phe Ser Arg		1070
	1075	1080
Pro Val Leu Ser His Gln Lys Ser Gln Pro Ser Pro Val Thr Val Lys		1085
1090	1095	1100
Pro Lys Pro Pro Ala Arg Ser Ser Ser Leu Pro Lys Val Ser Ser Gly		

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1105          1110          1115          1120
Tyr Ser Ser Pro Thr Thr Ser Glu Met Ser Ile Lys Asp Ser Pro Ser
          1125          1130          1135
Gln His Ser Gly Arg Pro Ser Pro Gly Cys Asp Ser Gln Thr Ser Gln
          1140          1145          1150
Leu Asp Gln Pro Leu Phe Lys Leu Lys Tyr Pro Ser Ser Pro Tyr Ser
          1155          1160          1165
Ala His Ile Ser Lys Ser Pro Arg Asn Met Ser Pro Ser Ser Gly His
          1170          1175          1180
Gln Ser Pro Ala Gly Ser Ala Pro Ser Pro Ala Leu Ser Tyr Ser Ser
1185          1190          1195          1200
Ala Gly Ser Ala Arg Ser Ser Pro Ala Asp Ala Pro Asp Ile Asp Lys
          1205          1210          1215
Leu Lys Met Ala Ala Ile Asp Glu Lys Val Gln Ala Val His Asn Leu
          1220          1225          1230
Lys Met Phe Trp Gln Ser Thr Pro Gln His Ser Thr Gly Pro Met Lys
          1235          1240          1245
Ile Phe Arg Gly Ala Pro Gly Thr Met Thr Ser Lys Arg Asp Val Leu
          1250          1255          1260
Ser Leu Leu Asn Leu Ser Pro Arg Pro Asn Lys Lys Glu Glu Gly Val
1265          1270          1275          1280
Asp Lys Leu Glu Leu Lys Glu Leu Ser Leu Gln Gln His Asp Gly Ala
          1285          1290          1295
Pro Pro Lys Ala Pro Pro Asn Gly His Trp Arg Thr Glu Thr Thr Ser
          1300          1305          1310
Leu Gly Ser Leu Pro Leu Pro Ala Gly Pro Pro Ala Thr Ala Pro Ala
          1315          1320          1325
Arg Pro Leu Arg Leu Pro Ser Gly Asn Gly Tyr Lys Phe Leu Ser Pro
          1330          1335          1340
Gly Arg Phe Phe Pro Ser Ser Lys Cys
1345          1350          1353

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<210> 3167
<211> 254
<212> PRT
<213> Homo sapiens

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<400> 3167
Ala Ala Arg Arg Arg Gln Lys Gly Lys Glu Glu Asn Met Met Met Asp
 1          5          10          15
Leu Phe Glu Thr Gly Ser Tyr Phe Phe Tyr Leu Asp Gly Glu Asn Val
          20          25          30
Thr Leu Gln Pro Leu Glu Val Ala Glu Gly Ser Pro Leu Tyr Pro Gly
          35          40          45
Ser Asp Gly Thr Leu Ser Pro Cys Gln Asp Gln Met Pro Pro Glu Ala
          50          55          60
Gly Ser Asp Ser Ser Gly Glu Glu His Val Leu Ala Pro Pro Gly Leu
          65          70          75          80
Gln Pro Pro His Cys Pro Gly Gln Cys Leu Ile Trp Ala Cys Lys Thr
          85          90          95
Cys Lys Arg Lys Ser Ala Pro Thr Asp Arg Arg Lys Ala Ala Thr Leu
          100          105          110
Arg Glu Arg Arg Arg Leu Lys Lys Ile Asn Glu Ala Phe Glu Ala Leu
          115          120          125
Lys Arg Arg Thr Val Ala Asn Pro Asn Gln Arg Leu Pro Lys Val Glu
          130          135          140
Ile Leu Arg Ser Ala Ile Ser Tyr Ile Glu Arg Leu Gln Asp Leu Leu
          145          150          155          160
His Arg Leu Asp Gln Gln Glu Lys Met Gln Glu Leu Gly Val Asp Pro
          165          170          175
Phe Ser Tyr Arg Pro Lys Gln Glu Asn Leu Glu Gly Ala Asp Phe Leu

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<210> 3168
<211> 151
<212> PRT
<213> Homo sapiens
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<210> 3169
<211> 1003
<212> PRT
<213> Homo sapiens
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4861

4862

625 630 635 640
 Ala Lys Glu Glu Ser Glu Lys Gln Leu Cys Leu Ile Glu Ala Gln Thr
 645 650 655
 Met Glu Ala Leu Leu Ala Leu Leu Pro Glu Leu Ser Val Leu Ala Gln
 660 665 670
 Gln Asn Tyr Thr Glu Trp Leu Gln Asp Leu Lys Glu Lys Gly Pro Thr
 675 680 685
 Leu Leu Lys His Pro Pro Ala Pro Ala Glu Pro Ser Ser Asp Leu Ala
 690 695 700
 Ser Lys Leu Arg Glu Ala Glu Glu Thr Gln Ser Thr Leu Gln Ala Glu
 705 710 715 720
 Cys Asp Gln Tyr Arg Ser Ile Leu Ala Glu Thr Glu Gly Met Leu Arg
 725 730 735
 Asp Leu Gln Lys Ser Val Glu Glu Glu Gln Val Trp Arg Ala Lys
 740 745 750
 Val Gly Ala Ala Glu Glu Glu Leu Gln Lys Ser Arg Val Thr Val Lys
 755 760 765
 His Leu Glu Glu Ile Val Glu Lys Leu Lys Gly Glu Leu Glu Ser Ser
 770 775 780
 Asp Gln Val Arg Glu His Thr Ser His Leu Glu Ala Glu Leu Glu Lys
 785 790 795 800
 His Met Ala Ala Ala Ser Ala Glu Cys Gln Asn Tyr Ala Lys Glu Val
 805 810 815
 Ala Gly Leu Arg Gln Leu Leu Leu Glu Ser Gln Ser Gln Leu Asp Ala
 820 825 830
 Ala Lys Ser Glu Ala Gln Lys Gln Ser Asp Glu Leu Ala Leu Val Arg
 835 840 845
 Gln Gln Leu Ser Glu Met Lys Ser His Val Glu Asp Gly Asp Ile Ala
 850 855 860
 Gly Ala Pro Ala Ser Ser Pro Glu Ala Pro Pro Ala Glu Gln Asp Pro
 865 870 875 880
 Val Gln Leu Lys Thr Gln Leu Glu Trp Thr Glu Ala Ile Leu Glu Asp
 885 890 895
 Glu Gln Thr Gln Arg Gln Lys Leu Thr Ala Glu Phe Glu Glu Ala Gln
 900 905 910
 Thr Ser Ala Cys Arg Leu Gln Glu Glu Leu Glu Lys Leu Arg Thr Ala
 915 920 925
 Gly Pro Leu Glu Ser Ser Glu Thr Glu Glu Ala Ser Gln Leu Lys Glu
 930 935 940
 Arg Leu Glu Lys Glu Lys Lys Leu Thr Ser Asp Leu Gly Arg Ala Ala
 945 950 955 960
 Thr Arg Leu Gln Glu Leu Leu Lys Thr Thr Gln Glu Gln Leu Ala Arg
 965 970 975
 Glu Lys Asp Thr Val Lys Lys Leu Gln Glu Gln Leu Glu Lys Ala Glu
 980 985 990
 Asp Gly Ser Ser Ser Lys Glu Gly Thr Ser Val
 995 1000 1003

<210> 3170
 <211> 901
 <212> PRT
 <213> Homo sapiens

<400> 3170
 Thr His Ala Ser Glu Lys Tyr Ser Tyr Gly His Leu Pro Thr His Ser
 1 5 10 15
 Ile Thr Ala His Pro Met Val Thr Ile Arg Ile Ser Asp Arg Gln Arg
 20 25 30
 Leu Ile Gln Pro Tyr Ile His Asn Tyr Ser Trp Leu Leu Phe Ala Ala
 35 40 45
 Leu Ala Leu Tyr Ser Ala His Leu Ala Ser Ala Glu Asp Val Asp Gly

50					55					60					
Glu Lys Leu Asp Pro Gln Thr Arg Ser Ser Ala Thr Thr Leu Arg Ser															
65					70					75					80
Gln Cys Met Gln Leu Val Gly Asp Cys Leu Met Lys Ala His Gln Gly															
				85					90						95
Lys Gly Leu Lys Ala Leu Ala Leu Leu Gly Val Leu Pro Asp Gly Asp															
			100					105							110
Ser Ser Leu Glu Asp His Ala Leu Pro Val Thr Val Pro Thr Gly Ala															
			115					120							125
Ser Glu Glu Gln Leu Glu Lys Lys Ala Val Gln Gly Ala Glu Leu Ser															
			130					135							140
Glu Ala Gly Asn Gly Lys Arg Ala Val His Glu Glu Ile Arg Pro Val															
					150										160
Asp Phe Lys Gln Arg Asn Lys Ala Asp Lys Gly Val Ser Leu Ser Lys															
			165												175
Asp Pro Ser Cys Gln Thr Gln Ile Ser Asp Ser Pro Ala Asp Ala Ser															
			180					185							190
Pro Pro Thr Gly Leu Pro Asp Ala Glu Asp Ser Glu Val Ser Ser Gln															
			195					200							205
Lys Pro Ile Glu Glu Lys Ala Val Thr Pro Ser Pro Glu Gln Val Phe															
			210					215							220
Ala Glu Cys Ser Gln Lys Arg Ile Leu Gly Leu Leu Ala Ala Met Leu															
			225					230							240
Pro Pro Leu Lys Ser Gly Pro Thr Val Pro Leu Ile Asp Leu Glu His															
			245												255
Val Leu Pro Leu Met Phe Gln Val Val Ile Ser Asn Ala Gly His Leu															
			260					265							270
Asn Glu Thr Tyr His Leu Thr Leu Gly Leu Leu Gly Gln Leu Ile Ile															
			275					280							285
Arg Leu Leu Pro Ala Glu Val Asp Ala Ala Val Ile Lys Val Leu Ser															
			290					295							300
Ala Lys His Asn Leu Phe Ala Ala Gly Asp Ser Ser Ile Val Pro Asp															
			305					310							320
Gly Trp Lys Thr Thr His Leu Leu Phe Ser Leu Gly Ala Val Cys Leu															
			325												335
Asp Ser Arg Val Gly Leu Asp Trp Ala Cys Ser Met Ala Glu Ile Leu															
			340					345							350
Arg Ser Leu Asn Ser Ala Pro Leu Trp Arg Asp Val Ile Ala Thr Phe															
			355					360							365
Thr Asp His Cys Ile Lys Gln Leu Pro Phe Gln Leu Lys His Thr Asn															
			370					375							380
Ile Phe Thr Leu Leu Val Leu Val Gly Phe Pro Gln Val Leu Cys Val															
			385					390							400
Gly Thr Arg Cys Val Tyr Met Asp Asn Ala Asn Glu Pro His Asn Val															
			405												415
Ile Ile Leu Lys His Phe Thr Glu Lys Asn Arg Ala Val Ile Val Asp															
			420					425							430
Val Lys Thr Arg Lys Arg Lys Thr Val Lys Asp Tyr Gln Leu Val Gln															
			435					440							445
Lys Gly Gly Gly Gln Glu Cys Gly Asp Ser Arg Ala Gln Leu Ser Gln															
			450					455							460
Tyr Ser Gln His Phe Ala Phe Ile Ala Ser His Leu Leu Gln Ser Ser															
			465					470							480
Met Asp Ser His Cys Pro Glu Ala Val Glu Ala Thr Trp Val Leu Ser															
			485												495
Leu Ala Leu Lys Gly Leu Tyr Lys Thr Leu Lys Ala His Gly Phe Glu															
			500					505							510
Glu Ile Arg Ala Thr Phe Leu Gln Thr Asp Leu Leu Lys Leu Leu Val															
			515					520							525
Lys Lys Cys Ser Lys Gly Thr Gly Phe Ser Lys Thr Trp Leu Leu Arg															
			530					535							540
Asp Leu Glu Ile Leu Ser Ile Met Leu Tyr Ser Ser Lys Lys Glu Ile															
			545					550							560
Asn Ala Leu Ala Glu His Gly Asp Leu Glu Leu Asp Glu Arg Gly Asp															

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<210> 3171
<211> 156
<212> PRT
<213> Homo sapiens
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4865

				85					90					95			
Cys	Gln	Arg	Ser	Gln	Arg	Phe	Leu	Asn	Asp	Pro	Gly	His	Leu	Leu	Trp		
			100					105					110				
Gly	Asp	Arg	Pro	Glu	Ala	Gln	Leu	Gly	Ser	Gln	Ala	Asp	Ser	Lys	Pro		
		115					120					125					
Leu	Gln	Pro	Leu	Pro	Asn	Thr	Ala	His	Ser	Ile	Ser	Asp	Arg	Leu	Pro		
	130					135						140					
Glu	Glu	Lys	Met	Gln	Thr	Gln	Gly	Ser	Ser	Asn	Gln						
145					150					155	156						

<210> 3172
 <211> 164
 <212> PRT
 <213> Homo sapiens

<400> 3172

Phe	Arg	Arg	Ala	Gly	Ala	Gly	Arg	Gly	Arg	Arg	Arg	Gly	Glu	Val	Thr		
1				5				10					15				
Ser	Pro	Leu	Ser	Pro	Glu	Pro	Leu	Ala	Phe	Gln	Ser	Leu	Ala	Thr	Ser		
		20						25				30					
Arg	Arg	Pro	Glu	Pro	Gln	Thr	Thr	Gln	Thr	Val	Arg	Ser	Ser	Ala	Leu		
		35				40					45						
Pro	Ala	Pro	Pro	Ala	Ser	Pro	Met	Ser	Gln	Tyr	Ala	Pro	Ser	Pro	Asp		
	50				55				60								
Phe	Lys	Arg	Ala	Leu	Asp	Ser	Ser	Pro	Glu	Ala	Asn	Thr	Glu	Asp	Asp		
65				70					75				80				
Lys	Thr	Glu	Glu	Asp	Val	Pro	Met	Pro	Lys	Asn	Tyr	Leu	Trp	Leu	Thr		
			85					90				95					
Ile	Val	Ser	Cys	Phe	Cys	Pro	Ala	Tyr	Pro	Ile	Asn	Ile	Val	Ala	Leu		
		100					105					110					
Val	Phe	Ser	Ile	Met	Ser	Leu	Asn	Ser	Tyr	Asn	Asp	Gly	Asp	Tyr	Glu		
	115					120					125						
Gly	Ala	Arg	Arg	Leu	Gly	Arg	Asn	Ala	Lys	Trp	Val	Ala	Ile	Ala	Ser		
	130				135					140							
Ile	Ile	Ile	Gly	Leu	Leu	Ile	Ile	Gly	Ile	Ser	Cys	Ala	Val	His	Phe		
145				150						155				160			
Thr	Arg	Asn	Ala														
			164														

<210> 3173
 <211> 1348
 <212> PRT
 <213> Homo sapiens

<400> 3173

Phe	Arg	Ser	Gly	Gly	Cys	Arg	Arg	Arg	Ala	Trp	Thr	Ser	Arg	Trp	Pro		
1				5				10					15				
Gln	Arg	Arg	Arg	Ser	Pro	Glu	Ser	Cys	Glu	Ala	Pro	Leu	Ser	Ala	Pro		
		20						25				30					
Leu	Trp	Gly	Pro	Gln	Arg	Gly	Leu	Pro	Gly	Arg	Glu	Pro	Leu	Arg	Ser		
	35					40					45						
Arg	Ser	Ala	Ser	Ala	Ile	Ala	Leu	Arg	Thr	Ile	Gly	His	Ile	Leu	Ala		
	50				55				60								
Leu	Leu	Leu	Arg	Leu	Leu	His	Leu	Gly	Leu	Gly	Ser	Gly	Gly	Cys	Arg		
65				70					75				80				
Glu	Asp	Val	Pro	Pro	Ser	Gly	Arg	Gly	Lys	Lys	Glu	Glu	Lys	Met	Lys		
			85					90				95					
Lys	His	Arg	Arg	Ala	Leu	Ala	Leu	Val	Ser	Cys	Leu	Phe	Leu	Cys	Ser		

4867

4868

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1125      1130      1135
Tyr Ile Ser Lys Leu Pro Lys Ser Asn Gln Tyr Pro Ser Pro Lys Arg
      1140      1145      1150
Cys Phe Ser Ser Tyr Asp Asp Met Asn Leu Lys Arg Arg Thr Ser Phe
      1155      1160      1165
Pro Leu Met Arg Ser Lys Ser Leu Gln Leu Thr Gly Lys Glu Val Asp
      1170      1175      1180
Pro Asn Asp Leu Tyr Ile Val Glu Pro Leu Lys Phe Ser Pro Glu Lys
1185      1190      1195      1200
Lys Lys Lys Arg Cys Lys Tyr Lys Ile Glu Lys Ile Glu Thr Ile Lys
      1205      1210      1215
Pro Glu Glu Pro Leu His Pro Ile Ala Asn Gly Asp Ile Lys Gly Arg
      1220      1225      1230
Lys Pro Phe Thr Asn Gln Arg Asp Phe Ser Asn Met Gly Glu Val Tyr
      1235      1240      1245
His Ser Ser Tyr Lys Gly Pro Pro Ser Glu Gly Ser Ser Glu Thr Ser
      1250      1255      1260
Ser Gln Ser Glu Glu Ser Tyr Phe Cys Gly Ile Ser Ala Cys Thr Ser
1265      1270      1275      1280
Leu Cys Asn Gly Gln Ser Gln Lys Thr Lys Thr Glu Lys Arg Ala Leu
      1285      1290      1295
Lys Arg Arg Arg Ser Lys Val Gln Asp Gln Gly Lys Leu Ile Lys Thr
      1300      1305      1310
Leu Ile Gln Thr Lys Ser Gly Ser Leu Pro Ser Leu His Asp Ile Ile
      1315      1320      1325
Lys Gly Asn Lys Glu Ile Thr Val Gly Thr Phe Gly Val Thr Ala Val
      1330      1335      1340
Ser Gly His Ile
1345      1348

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<210> 3174
<211> 1394
<212> PRT
<213> Homo sapiens

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<400> 3174
Arg Lys Cys Ser Lys Glu Lys Ala Ser Lys Thr Pro Ser Gln Lys Ile
 1      5      10      15
Pro Thr Thr Pro Cys Cys Val Leu Gln Ala Gly Pro Glu Pro Arg Ser
      20      25      30
Leu Ala Glu Arg Met Gly Ala Asp Gly Glu Thr Val Val Leu Lys Asn
      35      40      45
Met Leu Ile Gly Val Asn Leu Ile Leu Leu Gly Ser Met Ile Lys Pro
      50      55      60
Ser Glu Cys Gln Leu Glu Val Thr Thr Glu Arg Val Gln Arg Gln Ser
      65      70      75      80
Val Glu Glu Glu Gly Gly Ile Ala Asn Tyr Asn Thr Ser Ser Lys Glu
      85      90      95
Gln Pro Val Val Phe Asn His Val Tyr Asn Ile Asn Val Pro Leu Asp
      100      105      110
Asn Leu Cys Ser Ser Gly Leu Glu Ala Ser Ala Glu Gln Glu Val Ser
      115      120      125
Ala Glu Asp Glu Thr Leu Ala Glu Tyr Met Gly Gln Thr Ser Asp His
      130      135      140
Glu Ser Gln Val Thr Phe Thr His Arg Ile Asn Phe Pro Lys Lys Ala
145      150      155      160
Cys Pro Cys Ala Ser Ser Ala Gln Val Leu Gln Glu Leu Leu Ser Arg
      165      170      175
Ile Glu Met Leu Glu Arg Glu Val Ser Val Leu Arg Asp Gln Cys Asn
      180      185      190
Ala Asn Cys Cys Gln Glu Ser Ala Ala Thr Gly Gln Leu Asp Tyr Ile

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195	200	205
Pro His Cys Ser Gly His	Gly Asn Phe Ser Phe Glu Ser Cys Gly Cys	
210	215	220
Ile Cys Asn Glu Gly Trp	Phe Gly Lys Asn Cys Ser Glu Pro Tyr Cys	
225	230	235
Pro Leu Gly Cys Ser Ser Arg Gly Val Cys Val Asp Gly Gln Cys Ile		240
	245	250
Cys Asp Ser Glu Tyr Ser Gly Asp Asp Cys Ser Glu Leu Arg Cys Pro		255
	260	265
Thr Asp Cys Ser Ser Arg Gly Leu Cys Val Asp Gly Glu Cys Val Cys		270
	275	280
Glu Glu Pro Tyr Thr Gly Glu Asp Cys Arg Glu Leu Arg Cys Pro Gly		285
	290	295
Asp Cys Ser Gly Lys Gly Arg Cys Ala Asn Gly Thr Cys Leu Cys Glu		300
305	310	315
Glu Gly Tyr Val Gly Glu Asp Cys Gly Gln Arg Gln Cys Leu Asn Ala		320
	325	330
Cys Ser Gly Arg Gly Gln Cys Glu Glu Gly Leu Cys Val Cys Glu Glu		335
	340	345
Gly Tyr Gln Gly Pro Asp Cys Ser Ala Val Ala Pro Pro Glu Asp Leu		350
	355	360
Arg Val Ala Gly Ile Ser Asp Arg Ser Ile Glu Leu Glu Trp Asp Gly		365
	370	375
Pro Met Ala Val Thr Glu Tyr Val Ile Ser Tyr Gln Pro Thr Ala Leu		380
385	390	395
Gly Gly Leu Gln Leu Gln Gln Arg Val Pro Gly Asp Trp Ser Gly Val		400
	405	410
Thr Ile Thr Glu Leu Glu Pro Gly Leu Thr Tyr Asn Ile Ser Val Tyr		415
	420	425
Ala Val Ile Ser Asn Ile Leu Ser Leu Pro Ile Thr Ala Lys Val Ala		430
	435	440
Thr His Leu Ser Thr Pro Gln Gly Leu Gln Phe Lys Thr Ile Thr Glu		445
	450	455
Thr Thr Val Glu Val Gln Trp Glu Pro Phe Ser Phe Ser Phe Asp Gly		460
465	470	475
Trp Glu Ile Ser Phe Ile Pro Lys Asn Asn Glu Gly Gly Val Ile Ala		480
	485	490
Gln Val Pro Ser Asp Val Thr Ser Phe Asn Gln Thr Gly Leu Lys Pro		495
	500	505
Gly Glu Glu Tyr Ile Val Asn Val Val Ala Leu Lys Glu Gln Ala Arg		510
	515	520
Ser Pro Pro Thr Ser Ala Ser Val Ser Thr Val Ile Asp Gly Pro Thr		525
	530	535
Gln Ile Leu Val Arg Asp Val Ser Asp Thr Val Ala Phe Val Glu Trp		540
545	550	555
Ile Pro Pro Arg Ala Lys Val Asp Phe Ile Leu Leu Lys Tyr Gly Leu		560
	565	570
Val Gly Gly Glu Gly Gly Arg Thr Thr Phe Arg Leu Gln Pro Pro Leu		575
	580	585
Ser Gln Tyr Ser Val Gln Ala Leu Arg Pro Gly Ser Arg Tyr Glu Val		590
	595	600
Ser Val Ser Ala Val Arg Gly Thr Asn Glu Ser Asp Ser Ala Thr Thr		605
	610	615
Gln Phe Thr Thr Glu Ile Asp Ala Pro Lys Asn Leu Arg Val Gly Ser		620
625	630	635
Arg Thr Ala Thr Ser Leu Asp Leu Glu Trp Asp Asn Ser Glu Ala Glu		640
	645	650
Val Gln Glu Tyr Lys Val Val Tyr Ile Thr Leu Ala Gly Glu Gln Tyr		655
	660	665
His Glu Val Leu Val Pro Arg Gly Ile Gly Pro Thr Thr Arg Ala Thr		670
	675	680
Leu Thr Asp Leu Val Pro Gly Thr Glu Tyr Gly Val Gly Ile Ser Ala		685
	690	695
Val Met Asn Ser Gln Gln Ser Val Pro Ala Thr Met Asn Ala Arg Thr		700

705					710				715				720
Glu	Leu	Asp	Ser	Pro	Arg	Asp	Leu	Met	Val	Thr	Ala	Ser	Thr
				725					730				735
Ser	Ile	Ser	Leu	Ile	Trp	Thr	Lys	Ala	Ser	Gly	Pro	Ile	Asp
			740					745				750	His
Arg	Ile	Thr	Phe	Thr	Pro	Ser	Ser	Gly	Ile	Ala	Ser	Glu	Val
		755					760					765	Thr
Pro	Lys	Asp	Arg	Thr	Ser	Tyr	Thr	Leu	Thr	Asp	Leu	Glu	Pro
	770					775					780	Gly	Ala
Glu	Tyr	Ile	Ile	Ser	Val	Thr	Ala	Glu	Arg	Gly	Arg	Gln	Gln
785					790					795			800
Glu	Ser	Thr	Val	Asp	Ala	Phe	Thr	Gly	Phe	Arg	Pro	Ile	Ser
				805					810				815
His	Phe	Ser	His	Val	Thr	Ser	Ser	Ser	Val	Asn	Ile	Thr	Trp
			820						825				830
Pro	Ser	Pro	Pro	Ala	Asp	Arg	Leu	Ile	Leu	Asn	Tyr	Ser	Pro
		835					840					845	Arg
Glu	Glu	Glu	Glu	Met	Met	Glu	Val	Ser	Leu	Asp	Ala	Thr	Lys
	850					855					860		His
Ala	Val	Leu	Met	Gly	Leu	Gln	Pro	Ala	Thr	Glu	Tyr	Ile	Val
865					870					875			880
Val	Ala	Val	His	Gly	Thr	Val	Thr	Ser	Glu	Pro	Ile	Val	Gly
				885					890				895
Thr	Thr	Gly	Ile	Asp	Pro	Pro	Lys	Asp	Ile	Thr	Ile	Ser	Asn
		900					905						910
Lys	Asp	Ser	Val	Met	Val	Ser	Trp	Ser	Pro	Pro	Val	Ala	Ser
	915						920					925	Phe
Tyr	Tyr	Arg	Val	Ser	Tyr	Arg	Pro	Thr	Gln	Val	Gly	Arg	Leu
	930					935					940		Asp
Ser	Val	Val	Pro	Asn	Thr	Val	Thr	Glu	Phe	Thr	Ile	Thr	Arg
945					950				955				960
Pro	Ala	Thr	Glu	Tyr	Glu	Ile	Ser	Leu	Asn	Ser	Val	Arg	Gly
				965					970				975
Glu	Ser	Glu	Arg	Ile	Cys	Thr	Leu	Val	His	Thr	Ala	Met	Asp
		980					985						990
Val	Asp	Leu	Ile	Ala	Thr	Asn	Ile	Thr	Pro	Thr	Glu	Ala	Leu
	995					1000					1005		Gln
Trp	Lys	Ala	Pro	Val	Gly	Glu	Val	Glu	Asn	Tyr	Val	Ile	Val
	1010					1015					1020		Leu
His	Phe	Ala	Val	Ala	Gly	Glu	Thr	Ile	Leu	Val	Asp	Gly	Val
1025					1030				1035				1040
Glu	Phe	Arg	Leu	Val	Asp	Leu	Leu	Pro	Ser	Thr	His	Tyr	Thr
			1045					1050					1055
Met	Tyr	Ala	Thr	Asn	Gly	Pro	Leu	Thr	Ser	Gly	Thr	Ile	Ser
		1060					1065					1070	Thr
Phe	Ser	Thr	Leu	Leu	Asp	Pro	Pro	Ala	Asn	Leu	Thr	Ala	Ser
	1075					1080					1085		Glu
Thr	Arg	Gln	Ser	Ala	Leu	Ile	Ser	Trp	Gln	Pro	Pro	Arg	Ala
	1090				1095					1100			Glu
Glu	Asn	Tyr	Val	Leu	Thr	Tyr	Lys	Ser	Thr	Asp	Gly	Ser	Arg
1105					1110				1115				1120
Leu	Ile	Val	Asp	Ala	Glu	Asp	Thr	Trp	Ile	Arg	Leu	Glu	Gly
			1125						1130				1135
Glu	Asn	Thr	Asp	Tyr	Thr	Val	Leu	Leu	Gln	Ala	Ala	Gln	Asp
		1140					1145					1150	Thr
Trp	Ser	Ser	Ile	Thr	Ser	Thr	Ala	Phe	Thr	Thr	Gly	Gly	Arg
		1155				1160					1165		Val
Pro	His	Pro	Gln	Asp	Cys	Ala	Gln	His	Leu	Met	Asn	Gly	Asp
	1170					1175				1180			Leu
Ser	Gly	Val	Tyr	Pro	Ile	Phe	Leu	Asn	Gly	Glu	Leu	Ser	Gln
1185					1190				1195				Lys
Gln	Val	Tyr	Cys	Asp	Met	Thr	Thr	Asp	Gly	Gly	Gly	Trp	Ile
			1205					1210					1215
Gln	Arg	Arg	Gln	Asn	Gly	Gln	Thr	Asp	Phe	Phe	Arg	Lys	Trp
													Ala

1220 1225 1230
 Tyr Arg Val Gly Phe Gly Asn Val Glu Asp Glu Phe Trp Leu Gly Leu
 1235 1240 1245
 Asp Asn Ile His Arg Ile Thr Ser Gln Gly Arg Tyr Glu Leu Arg Val
 1250 1255 1260
 Asp Met Arg Asp Gly Gln Glu Ala Ala Phe Ala Ser Tyr Asp Arg Phe
 1265 1270 1275 1280
 Ser Val Glu Asp Ser Arg Asn Leu Tyr Lys Leu Arg Ile Gly Ser Tyr
 1285 1290 1295
 Asn Gly Thr Ala Gly Asp Ser Leu Ser Tyr His Gln Gly Arg Pro Phe
 1300 1305 1310
 Ser Thr Glu Asp Arg Asp Asn Asp Val Ala Val Thr Asn Cys Ala Met
 1315 1320 1325
 Ser Tyr Lys Gly Ala Trp Trp Tyr Lys Asn Cys His Arg Thr Asn Leu
 1330 1335 1340
 Asn Gly Lys Tyr Gly Glu Ser Arg His Ser Gln Gly Ile Asn Trp Tyr
 1345 1350 1355 1360
 His Trp Lys Gly His Glu Phe Ser Ile Pro Phe Val Glu Met Lys Met
 1365 1370 1375
 Arg Pro Tyr Asn His Arg Leu Met Ala Gly Arg Lys Arg Gln Ser Leu
 1380 1385 1390
 Gln Phe
 1394

<210> 3175
 <211> 207
 <212> PRT
 <213> Homo sapiens

<400> 3175
 Arg Leu Gln Leu Pro Ala Cys Pro Ala Leu Ser Ala Ala His Pro Leu
 1 5 10 15
 Ala Leu Pro Ser Phe Ser Ser Gln Cys His Arg Ala Glu Ala Arg Ala
 20 25 30
 Ala Ala Ala Ala Thr Ala Glu Gly Thr Met Ala Ser Gly Val Thr Val
 35 40 45
 Asn Asp Glu Val Ile Lys Val Phe Asn Asp Met Lys Val Arg Lys Ser
 50 55 60
 Ser Thr Gln Glu Glu Ile Lys Lys Arg Lys Lys Ala Val Leu Phe Cys
 65 70 75 80
 Leu Ser Asp Asp Lys Arg Gln Ile Ile Val Glu Glu Ala Lys Gln Ile
 85 90 95
 Leu Val Gly Asp Ile Gly Asp Thr Val Glu Asp Pro Tyr Thr Ser Phe
 100 105 110
 Val Lys Leu Leu Pro Leu Asn Asp Cys Arg Tyr Ala Leu Tyr Asp Ala
 115 120 125
 Thr Tyr Glu Thr Lys Glu Ser Lys Lys Glu Asp Leu Val Phe Ile Phe
 130 135 140
 Trp Ala Pro Glu Ser Ala Pro Leu Lys Ser Lys Met Ile Tyr Ala Ser
 145 150 155 160
 Ser Lys Asp Ala Ile Lys Lys Lys Phe Thr Gly Ile Lys His Glu Trp
 165 170 175
 Gln Val Asn Gly Leu Asp Asp Ile Lys Asp Arg Ser Thr Leu Gly Glu
 180 185 190
 Lys Leu Gly Gly Asn Val Val Val Ser Leu Glu Gly Lys Pro Leu
 195 200 205 207

<210> 3176
 <211> 489

<212> PRT

<213> Homo sapiens

<400> 3176

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Pro Arg Gly Cys Trp Ser Ser Cys Leu Asp Ala Met Phe Arg Leu Asn
 1      5      10      15
Ser Leu Ser Ala Leu Ala Glu Leu Ala Val Gly Ser Arg Trp Tyr His
      20      25      30
Gly Gly Ser Gln Pro Ile Gln Ile Arg Arg Arg Leu Met Met Val Ala
      35      40      45
Phe Leu Gly Ala Ser Ala Val Thr Ala Ser Thr Gly Leu Leu Trp Lys
      50      55      60
Arg Ala His Ala Glu Ser Pro Pro Cys Val Asp Asn Leu Lys Ser Asp
      65      70      75      80
Ile Gly Asp Lys Gly Lys Asn Lys Asp Glu Gly Asp Val Cys Asn His
      85      90      95
Glu Lys Lys Thr Ala Asp Leu Ala Pro His Pro Glu Glu Lys Lys Lys
      100      105      110
Lys Arg Ser Gly Phe Arg Asp Arg Lys Val Met Glu Tyr Glu Asn Arg
      115      120      125
Ile Arg Ala Tyr Ser Thr Pro Asp Lys Ile Phe Arg Tyr Phe Ala Thr
      130      135      140
Leu Lys Val Ile Ser Glu Pro Gly Glu Ala Glu Val Phe Met Thr Pro
      145      150      155      160
Glu Asp Phe Val Arg Ser Ile Thr Pro Asn Glu Lys Gln Pro Glu His
      165      170      175
Leu Gly Leu Asp Gln Tyr Ile Ile Lys Arg Phe Asp Gly Lys Thr Glu
      180      185      190
Lys Ile Ser Gln Glu Arg Glu Lys Phe Ala Asp Glu Gly Ser Ile Phe
      195      200      205
Tyr Thr Leu Gly Glu Cys Gly Leu Ile Ser Phe Ser Asp Tyr Ile Phe
      210      215      220
Leu Thr Thr Val Leu Ser Thr Pro Gln Arg Asn Phe Glu Ile Ala Phe
      225      230      235      240
Lys Met Phe Asp Leu Asn Gly Asp Gly Glu Val Asp Met Glu Glu Phe
      245      250      255
Glu Gln Val Gln Ser Ile Ile Arg Ser Gln Thr Ser Met Gly Met Arg
      260      265      270
His Arg Asp Arg Pro Thr Thr Gly Asn Thr Leu Lys Ser Gly Leu Cys
      275      280      285
Ser Ala Leu Thr Thr Tyr Phe Gly Ala Asp Leu Lys Gly Lys Leu
      290      295      300
Thr Ile Lys Asn Phe Leu Glu Phe Gln Arg Lys Leu Gln His Asp Val
      305      310      315      320
Leu Lys Leu Glu Phe Glu Arg His Asp Pro Val Asp Gly Arg Ile Thr
      325      330      335
Glu Arg Gln Phe Gly Gly Met Leu Leu Ala Tyr Ser Gly Val Gln Ser
      340      345      350
Lys Lys Leu Thr Ala Met Gln Arg Gln Leu Lys Lys His Phe Lys Glu
      355      360      365
Gly Lys Gly Leu Thr Phe Gln Glu Val Glu Asn Phe Phe Thr Phe Leu
      370      375      380
Lys Asn Ile Asn Asp Val Asp Thr Ala Leu Ser Phe Tyr His Met Ala
      385      390      395      400
Gly Ala Ser Leu Asp Lys Val Thr Met Gln Gln Val Ala Arg Thr Val
      405      410      415
Ala Lys Val Glu Leu Ser Asp His Val Cys Asp Val Val Phe Ala Leu
      420      425      430
Phe Asp Cys Asp Gly Asn Gly Glu Leu Ser Asn Lys Glu Phe Val Ser
      435      440      445
Ile Met Lys Gln Arg Leu Met Arg Gly Leu Glu Lys Pro Lys Asp Met
      450      455      460
Gly Phe Thr Arg Leu Met Gln Ala Met Trp Lys Cys Ala Gln Glu Thr

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480

<400> 3177

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<210> 3178
<211> 201
<212> PRT
<213> Homo sapiens
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<400> 3178

4874

165 170 175
 Leu Val Arg Arg Tyr Asp Arg Asn Glu Ile Thr Ile Trp Ala Ser Glu
 180 185 190
 Lys Ser Ser Val Met Lys Lys Cys Lys
 195 200 201

<210> 3179
 <211> 469
 <212> PRT
 <213> Homo sapiens

<400> 3179
 Gln Glu Thr Ser Lys Met Glu Thr Leu Ser Phe Pro Arg Tyr Asn Val
 1 5 10 15
 Ala Glu Ile Val Ile His Ile Arg Asn Lys Ile Leu Thr Gly Ala Asp
 20 25 30
 Gly Lys Asn Leu Thr Lys Asn Asp Leu Tyr Pro Asn Pro Lys Pro Glu
 35 40 45
 Val Leu His Met Ile Tyr Met Arg Ala Leu Gln Ile Val Tyr Gly Ile
 50 55 60
 Arg Leu Glu His Phe Tyr Met Met Pro Val Asn Ser Glu Val Met Tyr
 65 70 75 80
 Pro His Leu Met Glu Gly Phe Leu Pro Phe Ser Asn Leu Val Thr His
 85 90 95
 Leu Asp Ser Phe Leu Pro Ile Cys Arg Val Asn Asp Phe Glu Thr Ala
 100 105 110
 Asp Ile Leu Cys Pro Lys Ala Lys Arg Thr Ser Arg Phe Leu Ser Gly
 115 120 125
 Ile Ile Asn Phe Ile His Phe Arg Glu Ala Cys Arg Glu Thr Tyr Met
 130 135 140
 Glu Phe Leu Trp Gln Tyr Lys Ser Ser Ala Asp Lys Met Gln Gln Leu
 145 150 155 160
 Asn Ala Ala His Gln Glu Ala Leu Met Lys Leu Glu Arg Leu Asp Ser
 165 170 175
 Val Pro Val Glu Glu Gln Glu Glu Phe Lys Gln Leu Ser Asp Gly Ile
 180 185 190
 Gln Glu Leu Gln Gln Ser Leu Asn Gln Asp Phe His Gln Lys Thr Ile
 195 200 205
 Val Leu Gln Glu Gly Asn Ser Gln Lys Lys Ser Asn Ile Ser Glu Lys
 210 215 220
 Thr Lys Arg Leu Asn Glu Leu Lys Leu Ser Val Val Ser Leu Lys Glu
 225 230 235 240
 Ile Gln Glu Ser Leu Lys Thr Lys Ile Val Asp Ser Pro Glu Lys Leu
 245 250 255
 Lys Asn Tyr Lys Glu Lys Met Lys Asp Thr Val Gln Lys Leu Lys Asn
 260 265 270
 Ala Arg Gln Glu Val Val Glu Lys Tyr Glu Ile Tyr Gly Asp Ser Val
 275 280 285
 Asp Cys Leu Pro Ser Cys Gln Leu Glu Val Gln Leu Tyr Gln Lys Lys
 290 295 300
 Ile Gln Asp Leu Ser Asp Asn Arg Glu Lys Leu Ala Ser Ile Leu Lys
 305 310 315 320
 Glu Ser Leu Asn Leu Glu Asp Gln Ile Glu Ser Asp Glu Ser Glu Leu
 325 330 335
 Lys Lys Leu Lys Thr Glu Glu Asn Ser Phe Lys Arg Leu Met Ile Val
 340 345 350
 Lys Lys Glu Lys Leu Ala Thr Ala Gln Phe Lys Ile Asn Lys Lys His
 355 360 365
 Glu Asp Val Lys Gln Tyr Lys Arg Thr Val Ile Glu Asp Cys Asn Lys
 370 375 380
 Val Gln Glu Lys Arg Gly Ala Val Tyr Glu Arg Val Thr Thr Ile Asn

385					390					395				400
His	Glu	Ile	Gln	Lys	Ile	Arg	Leu	Gly	Ile	Gln	Gln	Leu	Lys	Asp
				405					410					415
Ala	Asp	Arg	Glu	Lys	Leu	Lys	Ser	Gln	Glu	Ile	Phe	Leu	Asn	Leu
			420					425					430	
Thr	Ala	Leu	Glu	Lys	Tyr	His	Asp	Gly	Ile	Glu	Lys	Ala	Ala	Glu
		435					440						445	
Ser	Tyr	Ala	Lys	Ile	Asp	Glu	Lys	Thr	Ala	Glu	Leu	Lys	Arg	Lys
	450					455					460			
Phe	Lys	Met	Ser	Thr										
465				469										

<210> 3180
 <211> 2263
 <212> PRT
 <213> Homo sapiens

<400> 3180

Gly	Asn	Met	Ala	Cys	Trp	Pro	Gln	Leu	Arg	Leu	Leu	Leu	Trp	Lys	Asn
1				5					10					15	
Leu	Thr	Phe	Arg	Arg	Arg	Gln	Thr	Cys	Gln	Leu	Leu	Leu	Glu	Val	Ala
			20					25					30		
Trp	Pro	Leu	Phe	Ile	Phe	Leu	Ile	Leu	Ile	Ser	Val	Arg	Leu	Ser	Tyr
		35				40						45			
Pro	Pro	Tyr	Glu	Gln	His	Glu	Cys	His	Phe	Pro	Asn	Lys	Ala	Met	Pro
	50					55					60				
Ser	Ala	Gly	Thr	Leu	Pro	Trp	Val	Gln	Gly	Ile	Ile	Cys	Asn	Ala	Asn
	65			70					75						80
Asn	Pro	Cys	Phe	Arg	Tyr	Pro	Thr	Pro	Gly	Glu	Ala	Pro	Gly	Val	Val
			85					90						95	
Gly	Asn	Phe	Asn	Lys	Ser	Ile	Val	Ala	Arg	Leu	Phe	Ser	Asp	Ala	Arg
		100						105					110		
Arg	Leu	Leu	Leu	Tyr	Ser	Gln	Lys	Asp	Thr	Ser	Met	Lys	Asp	Met	Arg
	115					120						125			
Lys	Val	Leu	Arg	Thr	Leu	Gln	Gln	Ile	Lys	Lys	Ser	Ser	Ser	Asn	Leu
	130					135					140				
Lys	Leu	Gln	Asp	Phe	Leu	Val	Asp	Asn	Glu	Thr	Phe	Ser	Gly	Phe	Leu
	145			150					155					160	
Tyr	His	Asn	Leu	Ser	Leu	Pro	Lys	Ser	Thr	Val	Asp	Lys	Met	Leu	Arg
			165						170					175	
Ala	Asp	Val	Ile	Leu	His	Lys	Val	Phe	Leu	Gln	Gly	Tyr	Gln	Leu	His
		180						185					190		
Leu	Thr	Ser	Leu	Cys	Asn	Gly	Ser	Lys	Ser	Glu	Glu	Met	Ile	Gln	Leu
	195					200						205			
Gly	Asp	Gln	Glu	Val	Ser	Glu	Leu	Cys	Gly	Leu	Pro	Arg	Glu	Lys	Leu
	210				215						220				
Ala	Ala	Ala	Glu	Arg	Val	Leu	Arg	Ser	Asn	Met	Asp	Ile	Leu	Lys	Pro
	225				230					235				240	
Ile	Leu	Arg	Thr	Leu	Asn	Ser	Thr	Ser	Pro	Phe	Pro	Ser	Lys	Glu	Leu
			245					250						255	
Ala	Glu	Ala	Thr	Lys	Thr	Leu	Leu	His	Ser	Leu	Gly	Thr	Leu	Ala	Gln
	260							265					270		
Glu	Leu	Phe	Ser	Met	Arg	Ser	Trp	Ser	Asp	Met	Arg	Gln	Glu	Val	Met
	275					280						285			
Phe	Leu	Thr	Asn	Val	Asn	Ser	Ser	Ser	Ser	Ser	Thr	Gln	Ile	Tyr	Gln
	290				295						300				
Ala	Val	Ser	Arg	Ile	Val	Cys	Gly	His	Pro	Glu	Gly	Gly	Gly	Leu	Lys
	305				310					315				320	
Ile	Lys	Ser	Leu	Asn	Trp	Tyr	Glu	Asp	Asn	Asn	Tyr	Lys	Ala	Leu	Phe
			325					330						335	
Gly	Gly	Asn	Gly	Thr	Glu	Glu	Asp	Ala	Glu	Thr	Phe	Tyr	Asp	Asn	Ser

4877

850		855		860
Ser Tyr Trp Phe Gly Glu	Glu Ser Asp Glu Lys	Ser His Pro Gly Ser		
865	870	875	880	
Asn Gln Lys Arg Ile Ser	Glu Ile Cys Met Glu	Glu Glu Pro Thr His		
	885	890	895	
Leu Lys Leu Gly Val Ser	Ile Gln Asn Leu Val	Lys Val Tyr Arg Asp		
	900	905	910	
Gly Met Lys Val Ala Val	Asp Gly Leu Ala Leu	Asn Phe Tyr Glu Gly		
	915	920	925	
Gln Ile Thr Ser Phe Leu	Gly His Asn Gly Ala	Gly Lys Thr Thr Thr		
	930	935	940	
Met Ser Ile Leu Thr Gly	Leu Phe Pro Pro Thr	Ser Gly Thr Ala Tyr		
	945	950	955	960
Ile Leu Gly Lys Asp Ile	Arg Ser Glu Met Ser	Thr Ile Arg Gln Asn		
	965	970	975	
Leu Gly Val Cys Pro Gln	His Asn Val Leu Phe	Asp Met Leu Thr Val		
	980	985	990	
Glu Glu His Ile Trp Phe	Tyr Ala Arg Leu Lys	Gly Leu Ser Glu Lys		
	995	1000	1005	
His Val Lys Ala Glu Met	Glu Gln Met Ala Leu	Asp Val Gly Leu Pro		
	1010	1015	1020	
Ser Ser Lys Leu Lys Ser	Lys Thr Ser Gln Leu	Ser Gly Gly Met Gln		
1025	1030	1035	1040	
Arg Lys Leu Ser Val Ala	Leu Ala Phe Val Gly	Gly Ser Lys Val Val		
	1045	1050	1055	
Ile Leu Asp Glu Pro Thr	Ala Gly Val Asp Pro	Tyr Ser Arg Arg Gly		
	1060	1065	1070	
Ile Trp Glu Leu Leu Leu	Lys Tyr Arg Gln Gly	Arg Thr Ile Ile Leu		
	1075	1080	1085	
Ser Thr His His Met Asp	Glu Ala Asp Val Leu	Gly Asp Arg Ile Ala		
	1090	1095	1100	
Ile Ile Ser His Gly Lys	Leu Cys Cys Val Gly	Ser Ser Leu Phe Leu		
1105	1110	1115	1120	
Lys Asn Gln Leu Gly Thr	Gly Tyr Tyr Leu Thr	Leu Val Lys Lys Asp		
	1125	1130	1135	
Val Glu Ser Ser Leu Ser	Ser Cys Arg Asn Ser	Ser Ser Thr Val Ser		
	1140	1145	1150	
Tyr Leu Lys Lys Glu Asp	Ser Val Ser Gln Ser	Ser Ser Asp Ala Gly		
	1155	1160	1165	
Leu Gly Ser Asp His Glu	Ser Asp Thr Leu Thr	Ile Asp Val Ser Ala		
	1170	1175	1180	
Ile Ser Asn Leu Ile Arg	Lys His Val Ser Glu	Ala Arg Leu Val Glu		
1185	1190	1195	1200	
Asp Ile Gly His Glu Leu	Thr Tyr Val Leu Pro	Tyr Glu Ala Ala Lys		
	1205	1210	1215	
Glu Gly Ala Phe Val Glu	Leu Phe His Glu Ile	Asp Asp Arg Leu Ser		
	1220	1225	1230	
Asp Leu Gly Ile Ser Ser	Tyr Gly Ile Ser Glu	Thr Thr Leu Glu Glu		
	1235	1240	1245	
Ile Phe Leu Lys Val Ala	Glu Glu Ser Gly Val	Asp Ala Glu Thr Ser		
	1250	1255	1260	
Asp Gly Thr Leu Pro Ala	Arg Arg Asn Arg Arg	Ala Phe Gly Asp Lys		
1265	1270	1275	1280	
Gln Ser Cys Leu Arg Pro	Phe Thr Glu Asp Asp	Ala Ala Asp Pro Asn		
	1285	1290	1295	
Asp Ser Asp Ile Asp Pro	Glu Ser Arg Glu Thr	Asp Leu Leu Ser Gly		
	1300	1305	1310	
Met Asp Gly Lys Gly Ser	Tyr Gln Val Lys Gly	Trp Lys Leu Thr Gln		
	1315	1320	1325	
Gln Gln Phe Val Ala Leu	Leu Trp Lys Arg Leu	Leu Ile Ala Arg Arg		
	1330	1335	1340	
Ser Arg Lys Gly Phe Phe	Ala Gln Ile Val Leu	Pro Ala Val Phe Val		
1345	1350	1355	1360	
Cys Ile Ala Leu Val Phe	Ser Leu Ile Val Pro	Pro Phe Gly Lys Tyr		

1365 1370 1375
 Pro Ser Leu Glu Leu Gln Pro Trp Met Tyr Asn Glu Gln Tyr Thr Phe
 1380 1385 1390
 Val Ser Asn Asp Ala Pro Glu Asp Thr Gly Thr Leu Glu Leu Leu Asn
 1395 1400 1405
 Ala Leu Thr Lys Asp Pro Gly Phe Gly Thr Arg Cys Met Glu Gly Asn
 1410 1415 1420
 Pro Ile Pro Asp Thr Pro Cys Gln Ala Gly Glu Glu Trp Thr Thr
 1425 1430 1435 1440
 Ala Pro Val Pro Gln Thr Ile Met Asp Leu Phe Gln Asn Gly Asn Trp
 1445 1450 1455
 Thr Met Gln Asn Pro Ser Pro Ala Cys Gln Cys Ser Ser Asp Lys Ile
 1460 1465 1470
 Lys Lys Met Leu Pro Val Cys Pro Pro Gly Ala Gly Gly Leu Pro Pro
 1475 1480 1485
 Pro Gln Arg Lys Gln Asn Thr Ala Asp Ile Leu Gln Asp Leu Thr Gly
 1490 1495 1500
 Arg Asn Ile Ser Asp Tyr Leu Val Lys Thr Tyr Val Gln Ile Ile Ala
 1505 1510 1515 1520
 Lys Ser Leu Lys Asn Lys Ile Trp Val Asn Glu Phe Arg Tyr Gly Gly
 1525 1530 1535
 Phe Ser Leu Gly Val Ser Asn Thr Gln Ala Leu Pro Pro Ser Gln Glu
 1540 1545 1550
 Val Asn Asp Ala Thr Lys Gln Met Lys Lys His Leu Lys Leu Ala Lys
 1555 1560 1565
 Asp Ser Ser Ala Asp Arg Phe Leu Asn Ser Leu Gly Arg Phe Met Thr
 1570 1575 1580
 Gly Leu Asp Thr Arg Asn Asn Val Lys Val Trp Phe Asn Asn Lys Gly
 1585 1590 1595 1600
 Trp His Ala Ile Ser Ser Phe Leu Asn Val Ile Asn Asn Ala Ile Leu
 1605 1610 1615
 Arg Ala Asn Leu Gln Lys Gly Glu Asn Pro Ser His Tyr Gly Ile Thr
 1620 1625 1630
 Ala Phe Asn His Pro Leu Asn Leu Thr Lys Gln Gln Leu Ser Glu Val
 1635 1640 1645
 Ala Pro Met Thr Thr Ser Val Asp Val Leu Val Ser Ile Cys Val Ile
 1650 1655 1660
 Phe Ala Met Ser Phe Val Pro Ala Ser Phe Val Val Phe Leu Ile Gln
 1665 1670 1675 1680
 Glu Arg Val Ser Lys Ala Lys His Leu Gln Phe Ile Ser Gly Val Lys
 1685 1690 1695
 Pro Val Ile Tyr Trp Leu Ser Asn Phe Val Trp Asp Met Cys Asn Tyr
 1700 1705 1710
 Val Val Pro Ala Thr Leu Val Ile Ile Ile Phe Ile Cys Phe Gln Gln
 1715 1720 1725
 Lys Ser Tyr Val Ser Ser Thr Asn Leu Pro Val Leu Ala Leu Leu Leu
 1730 1735 1740
 Leu Leu Tyr Gly Trp Ser Ile Thr Pro Leu Met Tyr Pro Ala Ser Phe
 1745 1750 1755 1760
 Val Phe Lys Ile Pro Ser Thr Ala Tyr Val Val Leu Thr Ser Val Asn
 1765 1770 1775
 Leu Phe Ile Gly Ile Asn Gly Ser Val Ala Thr Phe Val Leu Glu Leu
 1780 1785 1790
 Phe Thr Asp Asn Lys Leu Asn Asn Ile Asn Asp Ile Leu Lys Ser Val
 1795 1800 1805
 Phe Leu Ile Phe Pro His Phe Cys Leu Gly Arg Gly Leu Ile Asp Met
 1810 1815 1820
 Val Lys Asn Gln Ala Met Ala Asp Ala Leu Glu Arg Phe Gly Glu Asn
 1825 1830 1835 1840
 Arg Phe Val Ser Pro Leu Ser Trp Asp Leu Val Gly Arg Asn Leu Phe
 1845 1850 1855
 Ala Met Ala Val Glu Gly Val Val Phe Phe Leu Ile Thr Val Leu Ile
 1860 1865 1870
 Gln Tyr Arg Phe Phe Ile Arg Pro Arg Pro Val Asn Ala Lys Leu Ser

1875 1880 1885
 Pro Leu Asn Asp Glu Asp Glu Asp Val Arg Arg Glu Arg Gln Arg Ile
 1890 1895 1900
 Leu Asp Gly Gly Gly Gln Asn Asp Ile Leu Glu Ile Lys Glu Leu Thr
 1905 1910 1915 1920
 Lys Ile Tyr Arg Arg Lys Arg Lys Pro Ala Val Asp Arg Ile Cys Val
 1925 1930 1935
 Gly Ile Pro Pro Gly Glu Cys Phe Gly Leu Leu Gly Val Asn Gly Ala
 1940 1945 1950
 Gly Lys Ser Ser Thr Phe Lys Met Leu Thr Gly Asp Thr Thr Val Thr
 1955 1960 1965
 Arg Gly Asp Ala Phe Leu Asn Arg Asn Ser Ile Leu Ser Asn Ile His
 1970 1975 1980
 Glu Val His Gln Asn Met Gly Tyr Cys Pro Gln Phe Asp Ala Ile Thr
 1985 1990 1995 2000
 Glu Leu Leu Thr Gly Arg Glu His Val Glu Phe Phe Ala Leu Leu Arg
 2005 2010 2015
 Gly Val Pro Glu Lys Glu Val Gly Lys Val Gly Glu Trp Ala Ile Arg
 2020 2025 2030
 Lys Leu Gly Leu Val Lys Tyr Gly Glu Lys Tyr Ala Gly Asn Tyr Ser
 2035 2040 2045
 Gly Gly Asn Lys Arg Lys Leu Ser Thr Ala Met Ala Leu Ile Gly Gly
 2050 2055 2060
 Pro Pro Val Val Phe Leu Asp Glu Pro Thr Thr Gly Met Asp Pro Lys
 2065 2070 2075 2080
 Ala Arg Arg Phe Leu Trp Asn Cys Ala Leu Ser Val Val Lys Glu Gly
 2085 2090 2095
 Arg Ser Val Val Leu Thr Ser His Ser Met Glu Glu Cys Glu Ala Leu
 2100 2105 2110
 Cys Thr Arg Met Ala Ile Met Val Asn Gly Arg Phe Arg Cys Leu Gly
 2115 2120 2125
 Ser Val Gln His Leu Lys Asn Arg Phe Gly Asp Gly Tyr Thr Ile Val
 2130 2135 2140
 Val Arg Ile Ala Gly Ser Asn Pro Asp Leu Lys Pro Val Gln Asp Phe
 2145 2150 2155 2160
 Phe Gly Leu Ala Phe Pro Gly Ser Val Pro Lys Glu Lys His Arg Asn
 2165 2170 2175
 Met Leu Gln Tyr Gln Leu Pro Ser Ser Leu Ser Ser Leu Ala Arg Ile
 2180 2185 2190
 Phe Ser Ile Leu Ser Gln Ser Lys Lys Arg Leu His Ile Glu Asp Tyr
 2195 2200 2205
 Ser Val Ser Gln Thr Thr Leu Asp Gln Val Phe Val Asn Phe Ala Lys
 2210 2215 2220
 Asp Gln Ser Asp Asp Asp His Leu Lys Asp Leu Ser Leu His Lys Asn
 2225 2230 2235 2240
 Gln Thr Val Val Asp Val Ala Val Leu Thr Ser Phe Leu Gln Asp Glu
 2245 2250 2255
 Lys Val Lys Glu Ser Tyr Val
 2260 2263

<210> 3181
 <211> 384
 <212> PRT
 <213> Homo sapiens

<400> 3181
 Pro Pro Ala Thr Ser Gln Ala Ala Leu Pro Glu Ala Leu Ser Lys Gly
 1 5 10 15
 Arg Glu Thr Pro Arg Pro Ala Thr His Pro Ala Arg Ser Gln Asp Val
 20 25 30
 Arg Pro Leu Ser Cys Pro Phe Asp Phe Leu Arg Asp Asn Val Glu Trp

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<210> 3182
<211> 428
<212> PRT
<213> Homo sapiens
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4881

65					70					75				80
Arg	Gln	Leu	Gln	His	Leu	Lys	Ser	Lys	Ala	Leu	Arg	Glu	Arg	Trp
				85					90					95
Leu	Glu	Gly	Thr	Pro	Ser	Ser	Ala	Ser	Glu	Gly	Asp	Glu	Asp	Leu
			100					105					110	
Arg	Gln	Met	Gln	Asp	Asp	Glu	Gln	Lys	Thr	Arg	Leu	Leu	Glu	Asp
		115						120					125	
Val	Ser	Arg	Leu	Glu	Lys	Gly	Ile	Glu	Val	Leu	Glu	Arg	Gly	Asp
		130				135						140		
Ala	Pro	Ala	Ala	Ala	Lys	Glu	Asn	Ala	Ala	Ala	Pro	Ser	Pro	Val
145					150					155				160
Ala	Pro	Ala	Pro	Ser	Pro	Ala	Lys	Glu	Glu	Arg	Lys	Thr	Glu	Val
				165					170					175
Met	Asn	Ser	Gln	Gln	Thr	Pro	Val	Gly	Thr	Pro	Lys	Asp	Lys	Arg
			180					185					190	
Ser	Asn	Thr	Pro	Leu	Arg	Thr	Val	Asp	Gly	Ser	Pro	Met	Met	Lys
		195					200					205		
Ala	Met	Tyr	Ser	Val	Glu	Ile	Thr	Val	Glu	Lys	Asp	Lys	Val	Thr
	210					215					220			
Glu	Thr	Arg	Val	Leu	Ser	Ser	Thr	Thr	Leu	Leu	Pro	Arg	Gln	Pro
225					230					235				240
Pro	Leu	Gly	Ile	Lys	Val	Tyr	Glu	Asp	Glu	Thr	Lys	Val	Val	His
				245					250					255
Val	Asp	Gly	Thr	Ala	Glu	Asn	Gly	Ile	His	Pro	Leu	Ser	Ser	Ser
			260					265					270	
Val	Asp	Glu	Leu	Ile	His	Lys	Ala	Asp	Glu	Val	Thr	Leu	Ser	Glu
	275						280					285		
Gly	Ser	Thr	Ala	Gly	Ala	Ala	Glu	Thr	Arg	Gly	Ala	Val	Glu	Gly
	290					295					300			
Ala	Arg	Thr	Thr	Pro	Ser	Arg	Arg	Glu	Ile	Thr	Gly	Val	Gln	Ala
305					310					315				320
Pro	Gly	Glu	Ala	Thr	Ser	Gly	Pro	Pro	Gly	Ile	Gln	Pro	Gly	Gln
				325					330					335
Pro	Pro	Val	Thr	Met	Ile	Phe	Met	Gly	Tyr	Gln	Asn	Val	Glu	Asp
		340						345					350	
Ala	Glu	Thr	Lys	Lys	Val	Leu	Gly	Leu	Gln	Asp	Thr	Ile	Thr	Ala
		355					360					365		
Leu	Val	Val	Ile	Glu	Asp	Ala	Ala	Glu	Pro	Lys	Glu	Pro	Ala	Pro
	370					375					380			
Asn	Gly	Ser	Ala	Ala	Glu	Pro	Pro	Thr	Glu	Ala	Ala	Ser	Arg	Glu
385					390					395				400
Asn	Gln	Ala	Gly	Pro	Glu	Ala	Thr	Thr	Ser	Asp	Pro	Gln	Asp	Leu
				405					410					415
Met	Lys	Lys	His	Arg	Cys	Lys	Cys	Cys	Ser	Ile	Met			
			420					425			428			

<210> 3183

<211> 533

<212> PRT

<213> Homo sapiens

<400> 3183

Ile	Ala	Pro	Thr	Gly	Gly	Ser	His	Ser	Glu	Ile	Gln	Lys	Gln	Leu	Gly
1				5					10					15	
Ser	Gly	Gly	Asp	Ser	Ser	Ser	Gln	Arg	Arg	Ala	Glu	Arg	Arg	Thr	Glu
			20					25					30		
Pro	Arg	Ser	Ala	Pro	Arg	Pro	Arg	Trp	Gly	Arg	Ser	Ala	Arg	Ser	Pro
			35				40					45			
Gly	Ala	His	Lys	Leu	Pro	Gly	Pro	Pro	Arg	Arg	Arg	Asp	Pro	Gly	Ala
	50					55					60				
Trp	Ala	Arg	Leu	Glu	Ala	Ala	Ala	Ala	His	Arg	His	Ser	Arg	Gly	Ser

65					70					75				80
Met	Gly	Arg	Arg	Met	Arg	Gly	Ala	Ala	Ala	Thr	Ala	Gly	Leu	Trp
				85						90				95
Leu	Ala	Leu	Gly	Ser	Leu	Leu	Ala	Leu	Trp	Gly	Gly	Leu	Leu	Pro
			100					105					110	
Arg	Thr	Glu	Leu	Pro	Ala	Ser	Arg	Pro	Pro	Glu	Asp	Arg	Leu	Pro
		115					120				125			
Arg	Pro	Ala	Arg	Ser	Gly	Gly	Pro	Ala	Pro	Ala	Pro	Arg	Phe	Pro
	130					135					140			Leu
Pro	Pro	Pro	Leu	Ala	Trp	Asp	Ala	Arg	Gly	Gly	Ser	Leu	Lys	Thr
145					150					155				160
Arg	Ala	Leu	Leu	Thr	Leu	Ala	Ala	Gly	Ala	Asp	Gly	Pro	Pro	Arg
				165				170						175
Ser	Arg	Ser	Glu	Pro	Arg	Trp	His	Val	Ser	Ala	Arg	Gln	Pro	Arg
			180				185						190	
Glu	Glu	Ser	Ala	Ala	Val	His	Gly	Gly	Val	Phe	Trp	Ser	Arg	Gly
		195					200					205		Leu
Glu	Glu	Gln	Val	Pro	Pro	Gly	Phe	Ser	Glu	Ala	Gln	Ala	Ala	Trp
	210					215					220			
Leu	Glu	Ala	Ala	Arg	Gly	Ala	Arg	Met	Val	Ala	Leu	Glu	Arg	Gly
225					230					235				240
Cys	Gly	Arg	Ser	Ser	Asn	Arg	Leu	Ala	Arg	Phe	Ala	Asp	Gly	Thr
				245					250					255
Ala	Cys	Val	Arg	Tyr	Gly	Ile	Asn	Pro	Glu	Gln	Ile	Gln	Gly	Glu
		260					265					270		Ala
Leu	Ser	Tyr	Tyr	Leu	Ala	Arg	Leu	Leu	Gly	Leu	Gln	Arg	His	Val
	275						280					285		Pro
Pro	Leu	Ala	Leu	Ala	Arg	Val	Glu	Ala	Arg	Gly	Ala	Gln	Trp	Ala
	290					295					300			Gln
Val	Gln	Glu	Glu	Leu	Arg	Ala	Ala	His	Trp	Thr	Glu	Gly	Ser	Val
305					310					315				320
Ser	Leu	Thr	Arg	Trp	Leu	Pro	Asn	Leu	Thr	Asp	Val	Val	Val	Pro
				325					330					335
Pro	Trp	Arg	Ser	Glu	Asp	Gly	Arg	Leu	Arg	Pro	Leu	Arg	Asp	Ala
		340					345					350		Gly
Gly	Glu	Leu	Ala	Asn	Leu	Ser	Gln	Ala	Glu	Leu	Val	Asp	Leu	Val
	355					360					365			Gln
Trp	Thr	Asp	Leu	Ile	Leu	Phe	Asp	Tyr	Leu	Thr	Ala	Asn	Phe	Asp
	370					375					380			Arg
Leu	Val	Ser	Asn	Leu	Phe	Ser	Leu	Gln	Trp	Asp	Pro	Arg	Val	Met
385					390					395				400
Arg	Ala	Thr	Ser	Asn	Leu	His	Arg	Gly	Pro	Gly	Gly	Ala	Leu	Val
				405				410					415	Phe
Leu	Asp	Asn	Glu	Ala	Gly	Leu	Val	His	Gly	Tyr	Arg	Val	Ala	Gly
		420						425				430		Met
Trp	Asp	Lys	Tyr	Asn	Glu	Pro	Leu	Leu	Gln	Ser	Val	Cys	Val	Phe
	435					440					445			Arg
Glu	Arg	Thr	Ala	Arg	Arg	Val	Leu	Glu	Leu	His	Arg	Gly	Gln	Asp
	450					455					460			Ala
Ala	Ala	Arg	Leu	Leu	Arg	Leu	Tyr	Arg	Arg	His	Glu	Pro	Arg	Phe
465					470					475				Pro
Glu	Leu	Ala	Ala	Leu	Ala	Asp	Pro	His	Ala	Gln	Leu	Leu	Gln	Arg
				485					490					Arg
Leu	Asp	Phe	Leu	Ala	Lys	His	Ile	Leu	His	Cys	Lys	Ala	Lys	Tyr
		500						505					510	Gly
Arg	Arg	Ser	Gly	Asp	Leu	Val	Ser	Pro	Gly	Gly	Lys	Glu	Arg	Asp
	515						520					525		Leu
Gly	Leu	Gly	Tyr	Gly										
	530			533										

<210> 3184

<211> 334

<212> PRT

<213> Homo sapiens

<400> 3184

Gly Ser Thr His Ala Ser Ala Asp Ala Trp Ala Gln Trp Phe Cys Thr
 1 5 10 15
 Glu Ala Leu Val Met Gly Ala Pro Val Trp Tyr Leu Val Ala Ala Ala
 20 25 30
 Leu Leu Val Gly Phe Ile Leu Phe Leu Thr Arg Ser Arg Gly Arg Ala
 35 40 45
 Ala Ser Ala Gly Gln Glu Pro Leu His Asn Glu Glu Leu Ala Gly Ala
 50 55 60
 Gly Arg Val Ala Gln Pro Gly Pro Leu Glu Pro Glu Glu Pro Arg Ala
 65 70 75 80
 Gly Gly Arg Pro Arg Arg Arg Arg Asp Leu Gly Ser Arg Leu Gln Ala
 85 90 95
 Gln Arg Arg Ala Gln Arg Val Ala Trp Ala Glu Ala Asp Glu Asn Glu
 100 105 110
 Glu Glu Ala Val Ile Leu Ala Gln Glu Glu Glu Gly Val Glu Lys Pro
 115 120 125
 Ala Glu Thr His Leu Ser Gly Lys Ile Gly Ala Lys Lys Leu Arg Lys
 130 135 140
 Leu Glu Glu Lys Gln Ala Arg Lys Ala Gln Arg Glu Ala Glu Glu Ala
 145 150 155 160
 Glu Arg Glu Glu Arg Lys Arg Leu Glu Ser Gln Arg Glu Ala Glu Trp
 165 170 175
 Lys Lys Glu Glu Glu Arg Leu Arg Leu Glu Glu Glu Gln Lys Glu Glu
 180 185 190
 Glu Glu Arg Lys Ala Arg Glu Glu Gln Ala Gln Arg Glu His Glu Glu
 195 200 205
 Tyr Leu Lys Leu Lys Glu Ala Phe Val Val Glu Glu Glu Gly Val Gly
 210 215 220
 Glu Thr Met Thr Glu Glu Gln Ser Gln Ser Phe Leu Thr Glu Phe Ile
 225 230 235 240
 Asn Tyr Ile Lys Gln Ser Lys Val Val Leu Glu Asp Leu Ala Ser
 245 250 255
 Gln Val Gly Leu Arg Thr Gln Asp Thr Ile Asn Arg Ile Gln Asp Leu
 260 265 270
 Leu Ala Glu Gly Thr Ile Thr Gly Val Ile Asp Asp Arg Gly Lys Phe
 275 280 285
 Ile Tyr Ile Thr Pro Glu Glu Leu Ala Ala Val Ala Asn Phe Ile Arg
 290 295 300
 Gln Arg Gly Arg Val Ser Ile Ala Glu Leu Ala Gln Ala Ser Asn Ser
 305 310 315 320
 Leu Ile Ala Trp Gly Arg Glu Ser Pro Ala Gln Ala Pro Ala
 325 330 334

<210> 3185

<211> 1397

<212> PRT

<213> Homo sapiens

<400> 3185

Cys Leu Leu Ala Gly Lys Phe Ser Ser Thr Leu Tyr Glu Thr Gly Gly
 1 5 10 15
 Cys Asp Met Ser Leu Val Asn Phe Glu Pro Ala Ala Arg Arg Ala Ser
 20 25 30
 Asn Ile Cys Asp Thr Asp Ser His Val Ser Ser Ser Thr Ser Val Arg
 35 40 45
 Phe Tyr Pro His Asp Val Leu Ser Leu Pro Gln Ile Arg Leu Asn Arg

50	55	60
Leu Leu Thr Ile Asp Thr Asp Leu Leu Glu Gln Gln Asp Ile Asp Leu		
65	70	75
Ser Pro Asp Leu Ala Ala Thr Tyr Gly Pro Thr Glu Glu Ala Ala Gln		80
	85	90
Lys Val Lys His Tyr Tyr Arg Phe Trp Ile Leu Pro Gln Leu Trp Ile		95
	100	105
Gly Ile Asn Phe Asp Arg Leu Thr Leu Leu Ala Leu Phe Asp Arg Asn		110
	115	120
Arg Glu Ile Leu Glu Asn Val Leu Ala Val Ile Leu Ala Ile Leu Val		125
	130	135
Ala Phe Leu Gly Ser Ile Leu Leu Ile Gln Gly Phe Phe Arg Asp Ile		140
145	150	155
Trp Val Phe Gln Phe Cys Leu Val Ile Ala Ser Cys Gln Tyr Ser Leu		160
	165	170
Leu Lys Ser Val Gln Pro Asp Ser Ser Ser Pro Arg His Gly His Asn		175
	180	185
Arg Ile Ile Ala Tyr Ser Arg Pro Val Tyr Phe Cys Ile Cys Cys Gly		190
	195	200
Leu Ile Trp Leu Leu Asp Tyr Gly Ser Arg Asn Leu Thr Ala Thr Lys		205
	210	215
Phe Lys Leu Tyr Gly Ile Thr Phe Thr Asn Pro Leu Val Phe Ile Ser		220
225	230	235
Ala Arg Asp Leu Val Ile Val Phe Thr Leu Cys Phe Pro Ile Val Phe		240
	245	250
Phe Ile Gly Leu Leu Pro Gln Val Asn Thr Phe Val Met Tyr Leu Cys		255
	260	265
Glu Gln Leu Asp Ile His Ile Phe Gly Gly Asn Ala Thr Thr Ser Leu		270
	275	280
Leu Ala Ala Leu Tyr Ser Phe Ile Cys Ser Ile Val Ala Val Ala Leu		285
	290	295
Leu Tyr Gly Leu Cys Tyr Gly Ala Leu Lys Asp Ser Trp Asp Gly Gln		300
305	310	315
His Ile Pro Val Leu Phe Ser Ile Phe Cys Gly Leu Leu Val Ala Val		320
	325	330
Ser Tyr His Leu Ser Arg Gln Ser Ser Asp Pro Ser Val Leu Phe Ser		335
	340	345
Leu Val Gln Ser Lys Ile Phe Pro Lys Thr Glu Glu Lys Asn Pro Glu		350
	355	360
Asp Pro Leu Ser Glu Val Lys Asp Pro Leu Pro Glu Lys Leu Arg Asn		365
	370	375
Ser Val Ser Glu Arg Leu Gln Ser Asp Leu Val Val Cys Ile Val Ile		380
385	390	395
Gly Val Leu Tyr Phe Ala Ile His Val Ser Thr Val Phe Thr Val Leu		400
	405	410
Gln Pro Ala Leu Lys Tyr Val Leu Tyr Thr Leu Val Gly Phe Val Gly		415
	420	425
Phe Val Thr His Tyr Val Leu Pro Gln Val Arg Lys Gln Leu Pro Trp		430
	435	440
His Cys Phe Ser His Pro Leu Lys Thr Leu Glu Tyr Asn Gln Tyr		445
	450	455
Glu Val Arg Asn Ala Ala Thr Met Met Trp Phe Glu Lys Leu His Val		460
465	470	475
Trp Leu Leu Phe Val Glu Lys Asn Ile Ile Tyr Pro Leu Ile Val Leu		480
	485	490
Asn Glu Leu Ser Ser Ser Ala Glu Thr Ile Ala Ser Pro Lys Lys Leu		495
	500	505
Asn Thr Glu Leu Gly Ala Leu Met Ile Thr Val Ala Gly Leu Lys Leu		510
	515	520
Leu Arg Ser Ser Phe Ser Ser Pro Thr Tyr Gln Tyr Val Thr Val Ile		525
	530	535
Phe Thr Val Leu Phe Phe Lys Phe Asp Tyr Glu Ala Phe Ser Glu Thr		540
545	550	555
Met Leu Leu Asp Leu Phe Phe Met Ser Ile Leu Phe Asn Lys Leu Trp		560

4886

1075 1080 1085
 Leu Arg Lys Gly Cys Gly Ala Gly Cys Asn Ser Gly Gly Asn Ile Glu
 1090 1095 1100
 Asp Ser Asp Thr Gly Gly Gly Thr Ser Cys Thr Gly Asn Asn Ala Thr
 1105 1110 1115 1120
 Thr Ala Asn Asn Pro His Ser Asn Val Thr Gln Gly Ser Ile Gly Asn
 1125 1130 1135
 Pro Gly Gln Gly Ser Gly Thr Gly Leu His Pro Pro Val Thr Ser Tyr
 1140 1145 1150
 Pro Pro Thr Leu Gly Thr Ser His Ser Ser His Ser Val Gln Ser Gly
 1155 1160 1165
 Leu Val Arg Gln Ser Pro Ala Arg Ala Ser Val Ala Ser Gln Ser Ser
 1170 1175 1180
 Tyr Cys Tyr Ser Ser Arg His Ser Ser Leu Arg Met Ser Thr Thr Gly
 1185 1190 1195 1200
 Phe Val Pro Cys Arg Arg Ser Ser Thr Ser Gln Ile Ser Leu Arg Asn
 1205 1210 1215
 Leu Pro Ser Ser Ile Gln Ser Arg Leu Ser Met Val Asn Gln Met Glu
 1220 1225 1230
 Pro Ser Gly Gln Ser Gly Leu Ala Cys Val Gln His Gly Leu Pro Ser
 1235 1240 1245
 Ser Ser Ser Ser Ser Gln Ser Ile Pro Ala Cys Lys His His Thr Leu
 1250 1255 1260
 Val Gly Phe Leu Ala Thr Glu Gly Gly Gln Ser Ser Ala Thr Asp Ala
 1265 1270 1275 1280
 Gln Pro Gly Asn Thr Leu Ser Pro Ala Asn Asn Ser His Ser Arg Lys
 1285 1290 1295
 Ala Glu Val Ile Tyr Arg Val Gln Ile Val Asp Pro Ser Gln Ile Leu
 1300 1305 1310
 Glu Gly Ile Asn Leu Ser Lys Arg Lys Glu Leu Gln Trp Pro Asp Glu
 1315 1320 1325
 Gly Ile Arg Leu Lys Ala Gly Arg Asn Ser Trp Lys Asp Trp Ser Pro
 1330 1335 1340
 Gln Glu Gly Met Glu Gly His Val Ile His Arg Trp Val Pro Cys Ser
 1345 1350 1355 1360
 Arg Asp Pro Gly Thr Arg Ser His Ile Asp Lys Ala Val Leu Leu Val
 1365 1370 1375
 Gln Ile Asp Asp Lys Tyr Val Thr Val Ile Glu Thr Gly Val Leu Glu
 1380 1385 1390
 Leu Gly Ala Glu Val
 1395 1397

<210> 3186
 <211> 155
 <212> PRT
 <213> Homo sapiens

<400> 3186
 Ser Leu Ser Ala Met Arg Phe Leu Ala Ala Thr Phe Leu Leu Leu Ala
 1 5 10 15
 Leu Ser Thr Ala Ala Gln Ala Glu Pro Val Gln Phe Lys Asp Cys Gly
 20 25 30
 Ser Val Asp Gly Val Ile Lys Glu Val Asn Val Ser Pro Cys Pro Thr
 35 40 45
 Gln Pro Cys Gln Leu Ser Lys Gly Gln Ser Tyr Ser Val Asn Val Thr
 50 55 60
 Phe Thr Ser Asn Ile Gln Ser Lys Ser Ser Lys Ala Val Val His Gly
 65 70 75 80
 Ile Leu Met Gly Val Pro Val Pro Phe Pro Ile Pro Glu Pro Asp Gly
 85 90 95
 Cys Lys Ser Gly Ile Asn Cys Pro Ile Gln Lys Asp Lys Thr Tyr Ser

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      100      105      110
Tyr Leu Asn Lys Leu Pro Val Lys Ser Glu Tyr Pro Ser Ile Lys Leu
      115      120      125
Val Val Glu Trp Gln Leu Gln Asp Asp Lys Asn Gln Ser Leu Phe Cys
      130      135      140
Trp Glu Ile Pro Val Gln Ile Val Ser His Leu
145      150      155

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<210> 3187
 <211> 155
 <212> PRT
 <213> Homo sapiens

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      <400> 3187
Ser Leu Ser Ala Met Arg Phe Leu Ala Ala Thr Phe Leu Leu Leu Ala
  1      5      10      15
Leu Ser Thr Ala Ala Gln Ala Glu Pro Val Gln Phe Lys Asp Cys Gly
      20      25      30
Ser Val Asp Gly Val Ile Lys Glu Val Asn Val Ser Pro Cys Pro Thr
      35      40      45
Gln Pro Cys Gln Leu Ser Lys Gly Gln Ser Tyr Ser Val Asn Val Thr
      50      55      60
Phe Thr Ser Asn Ile Gln Ser Lys Ser Ser Lys Ala Val Val His Gly
      65      70      75      80
Ile Leu Met Gly Val Pro Val Pro Phe Pro Ile Pro Glu Pro Asp Gly
      85      90      95
Cys Lys Ser Gly Ile Asn Cys Pro Ile Gln Lys Asp Lys Thr Tyr Ser
      100      105      110
Tyr Leu Asn Lys Leu Pro Val Lys Ser Glu Tyr Pro Ser Ile Lys Leu
      115      120      125
Val Val Glu Trp Gln Leu Gln Asp Asp Lys Asn Gln Ser Leu Phe Cys
      130      135      140
Trp Glu Ile Pro Val Gln Ile Val Ser His Leu
145      150      155

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<210> 3188
 <211> 1160
 <212> PRT
 <213> Homo sapiens

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      <400> 3188
Pro Arg Val Arg Thr Lys Leu Ile Leu Leu Val Asn Asp Lys Lys Arg
  1      5      10      15
Tyr Glu Arg Val Gly Gly Gly Pro Lys Arg Leu Gly Arg Asp Val Glu
      20      25      30
Met Glu Glu Met Ile Glu Gln Leu Gln Glu Lys Val His Glu Leu Glu
      35      40      45
Lys Gln Asn Asp Thr Leu Lys Asn Arg Leu Ile Ser Ala Lys Gln Gln
      50      55      60
Leu Gln Thr Gln Gly Tyr Arg Gln Thr Pro Tyr Asn Asn Val Gln Ser
      65      70      75      80
Arg Ile Asn Thr Gly Arg Arg Lys Ala Asn Glu Asn Ala Gly Leu Gln
      85      90      95
Glu Cys Pro Arg Lys Gly Ile Lys Phe Gln Asp Ala Asp Val Ala Glu
      100      105      110
Thr Pro His Pro Met Phe Thr Lys Tyr Gly Asn Ser Leu Leu Glu Glu
      115      120      125
Ala Arg Gly Glu Ile Arg Asn Leu Glu Asn Val Ile Gln Ser Gln Arg

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130	135	140
Gly Gln Ile Glu Glu Leu Glu His Leu Ala Glu Ile Leu Lys Thr Gln		
145	150	155
Leu Arg Arg Lys Glu Asn Glu Ile Glu Leu Ser Leu Leu Gln Leu Arg		160
	165	170
Glu Gln Gln Ala Thr Asp Gln Arg Ser Asn Ile Arg Asp Asn Val Glu		175
	180	185
Met Ile Lys Leu His Lys Gln Leu Val Glu Lys Ser Asn Ala Leu Ser		190
	195	200
Ala Met Glu Gly Lys Phe Ile Gln Leu Gln Glu Lys Gln Arg Thr Leu		205
	210	215
Lys Ile Ser His Asp Ala Leu Met Ala Asn Gly Asp Glu Leu Asn Met		220
225	230	235
Gln Leu Lys Glu Gln Arg Leu Lys Cys Cys Ser Leu Glu Lys Gln Leu		240
	245	250
His Ser Met Lys Phe Ser Glu Arg Arg Ile Glu Glu Leu Gln Asp Arg		255
	260	265
Ile Asn Asp Leu Glu Lys Glu Arg Glu Leu Leu Lys Glu Asn Tyr Asp		270
	275	280
Lys Leu Tyr Asp Ser Ala Phe Ser Ala Ala His Glu Glu Gln Trp Lys		285
	290	295
Leu Lys Glu Gln Gln Leu Lys Val Gln Ile Ala Gln Leu Glu Thr Ala		300
305	310	315
Leu Lys Ser Asp Leu Thr Asp Lys Thr Glu Ile Leu Asp Arg Leu Lys		320
	325	330
Thr Glu Arg Asp Gln Asn Glu Lys Leu Val Gln Glu Asn Arg Glu Leu		335
	340	345
Gln Leu Gln Tyr Leu Glu Gln Lys Gln Gln Leu Asp Glu Leu Lys Lys		350
	355	360
Arg Ile Lys Leu Tyr Asn Gln Glu Asn Asp Ile Asn Ala Asp Glu Leu		365
	370	375
Ser Glu Ala Leu Leu Leu Ile Lys Ala Gln Lys Glu Gln Lys Asn Gly		380
385	390	395
Asp Leu Ser Phe Leu Val Lys Val Asp Ser Glu Ile Asn Lys Asp Leu		400
	405	410
Glu Arg Ser Met Arg Glu Leu Gln Ala Thr His Ala Glu Thr Val Gln		415
	420	425
Glu Leu Glu Lys Thr Arg Asn Met Leu Ile Met Gln His Lys Ile Asn		430
	435	440
Lys Asp Tyr Gln Met Glu Val Glu Ala Val Thr Arg Lys Met Glu Asn		445
	450	455
Leu Gln Gln Asp Tyr Glu Leu Lys Val Glu Gln Tyr Val His Leu Leu		460
465	470	475
Asp Ile Arg Ala Ala Arg Ile His Lys Leu Glu Ala Gln Leu Lys Asp		480
	485	490
Ile Ala Tyr Gly Thr Lys Gln Tyr Lys Phe Lys Pro Glu Ile Met Pro		495
	500	505
Asp Asp Ser Val Asp Glu Phe Asp Glu Thr Ile His Leu Glu Arg Gly		510
	515	520
Glu Asn Leu Phe Glu Ile His Ile Asn Lys Val Thr Phe Ser Ser Glu		525
	530	535
Val Leu Gln Ala Ser Gly Asp Lys Glu Pro Val Thr Phe Cys Thr Tyr		540
545	550	555
Ala Phe Tyr Asp Phe Glu Leu Gln Thr Thr Pro Val Val Arg Gly Leu		560
	565	570
His Pro Glu Tyr Asn Phe Thr Ser Gln Tyr Leu Val His Val Asn Asp		575
	580	585
Leu Phe Leu Gln Tyr Ile Gln Lys Asn Thr Ile Thr Leu Glu Val His		590
	595	600
Gln Ala Tyr Ser Thr Glu Tyr Glu Thr Ile Ala Ala Cys Gln Leu Lys		605
	610	615
Phe His Glu Ile Leu Glu Lys Ser Gly Arg Ile Phe Cys Thr Ala Ser		620
625	630	635
Leu Ile Gly Thr Lys Gly Asp Ile Pro Asn Phe Gly Thr Val Glu Tyr		640

4890

1155

1160

<210> 3189
 <211> 233
 <212> PRT
 <213> Homo sapiens

<400> 3189
 Met Lys Gly Ser Gly Trp His Leu Arg Ser Gly Met Val Gly Thr Leu
 1 5 10 15
 Ile Thr Thr Ile Leu Pro His Trp Arg Arg Thr Ala His Val Gly Thr
 20 25 30
 Asn Ile Leu Thr Ala Val Ser Tyr Leu Lys Gly Leu Trp Met Glu Cys
 35 40 45
 Val Trp His Ser Thr Gly Ile Tyr Gln Cys Gln Ile Tyr Arg Ser Leu
 50 55 60
 Leu Ala Leu Pro Gln Asp Leu Gln Ala Ala Arg Ala Leu Met Gly Ile
 65 70 75 80
 Ser Cys Leu Leu Ser Gly Ile Ala Cys Ala Cys Ala Val Ile Gly Met
 85 90 95
 Lys Cys Thr Arg Cys Ala Lys Gly Thr Pro Ala Lys Thr Thr Phe Ala
 100 105 110
 Ile Leu Gly Gly Thr Leu Phe Ile Leu Ala Gly Leu Leu Cys Met Gly
 115 120 125
 Ala Val Ser Trp Thr Thr Asn Asp Val Val Gln Asn Phe Tyr Asn Pro
 130 135 140
 Leu Leu Pro Ser Gly Met Lys Phe Glu Ile Gly Gln Ala Leu Tyr Leu
 145 150 155 160
 Gly Phe Ile Ser Ser Ser Leu Ser Leu Ile Gly Gly Thr Leu Leu Cys
 165 170 175
 Leu Ser Cys Gln Asp Glu Ala Pro Tyr Arg Pro Tyr Gln Ala Pro Pro
 180 185 190
 Arg Ala Thr Thr Thr Ala Asn Thr Ala Pro Ala Tyr Gln Pro Pro
 195 200 205
 Ala Ala Tyr Lys Asp Asn Arg Ala Pro Ser Val Thr Ser Ala Thr His
 210 215 220
 Ser Gly Tyr Arg Leu Asn Asp Tyr Val
 225 230 233

<210> 3190
 <211> 256
 <212> PRT
 <213> Homo sapiens

<400> 3190
 Asp Arg Met Ala Trp Gln Gly Leu Val Leu Ala Ala Cys Leu Leu Met
 1 5 10 15
 Phe Pro Ser Thr Thr Ala Asp Cys Leu Ser Arg Cys Ser Leu Cys Ala
 20 25 30
 Val Lys Thr Gln Asp Gly Pro Lys Pro Ile Asn Pro Leu Ile Cys Ser
 35 40 45
 Leu Gln Cys Gln Ala Ala Leu Leu Pro Ser Glu Glu Trp Glu Arg Cys
 50 55 60
 Gln Ser Phe Leu Ser Phe Phe Thr Pro Ser Thr Leu Gly Leu Asn Asp
 65 70 75 80
 Lys Glu Asp Leu Gly Ser Lys Ser Val Gly Glu Gly Pro Tyr Ser Glu
 85 90 95
 Leu Ala Lys Leu Ser Gly Ser Phe Leu Lys Glu Leu Glu Lys Ser Lys

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<210> 3191
<211> 181
<212> PRT
<213> Homo sapiens
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<210> 3192
<211> 518
<212> PRT
<213> Homo sapiens
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<400> 3192

Lys Val Ser Ala Asp Gly Met Gln Ser Cys Glu Ser Ser Gly Asp Ser
 1 5 10 15
 Ala Asp Asp Pro Leu Ser Arg Gly Leu Arg Arg Arg Gly Gln Pro Arg
 20 25 30
 Val Val Val Ile Gly Ala Gly Leu Ala Gly Leu Ala Ala Lys Ala
 35 40 45
 Leu Leu Glu Gln Gly Phe Thr Asp Val Thr Val Leu Glu Ala Ser Ser
 50 55 60
 His Ile Gly Gly Arg Val Gln Ser Val Lys Leu Gly His Ala Thr Phe
 65 70 75 80
 Glu Leu Gly Ala Thr Trp Ile His Gly Ser His Gly Asn Pro Ile Tyr
 85 90 95
 His Leu Thr Glu Ala Asn Gly Leu Leu Glu Glu Thr Thr Asp Gly Glu
 100 105 110
 Arg Ser Val Gly Arg Ile Ser Leu Tyr Ser Lys Asn Gly Val Ala Cys
 115 120 125
 Tyr Leu Thr Asn His Gly Arg Arg Ile Pro Lys Asp Val Val Glu Glu
 130 135 140
 Phe Ser Asp Leu Tyr Asn Glu Val Tyr Asn Leu Thr Gln Glu Phe Phe
 145 150 155 160
 Arg His Asp Lys Pro Val Asn Ala Glu Ser Gln Asn Ser Val Gly Val
 165 170 175
 Phe Thr Arg Glu Glu Val Arg Asn Arg Ile Arg Asn Asp Pro Asp Asp
 180 185 190
 Pro Glu Ala Thr Lys Arg Leu Lys Leu Ala Met Ile Gln Gln Tyr Leu
 195 200 205
 Lys Val Glu Ser Cys Glu Ser Ser Ser His Ser Met Asp Glu Val Ser
 210 215 220
 Leu Ser Ala Phe Gly Glu Trp Thr Glu Ile Pro Gly Ala His His Ile
 225 230 235 240
 Ile Pro Ser Gly Phe Met Arg Val Val Glu Leu Leu Ala Glu Gly Ile
 245 250 255
 Pro Ala His Val Ile Gln Leu Gly Lys Pro Val Arg Cys Ile His Trp
 260 265 270
 Asp Gln Ala Ser Ala Arg Pro Arg Gly Pro Glu Ile Glu Pro Arg Gly
 275 280 285
 Glu Gly Asp His Asn His Asp Thr Gly Glu Gly Gly Gln Gly Gly Glu
 290 295 300
 Glu Pro Arg Gly Gly Arg Trp Asp Glu Asp Glu Gln Trp Ser Val Val
 305 310 315 320
 Val Glu Cys Glu Asp Cys Glu Leu Ile Pro Ala Asp His Val Ile Val
 325 330 335
 Thr Val Ser Leu Gly Val Leu Lys Arg Gln Tyr Thr Ser Phe Phe Arg
 340 345 350
 Pro Gly Leu Pro Thr Glu Lys Val Ala Ala Ile His Arg Leu Gly Ile
 355 360 365
 Gly Thr Thr Asp Lys Ile Phe Leu Glu Phe Glu Glu Pro Phe Trp Gly
 370 375 380
 Pro Glu Cys Asn Ser Leu Gln Phe Val Trp Glu Asp Glu Ala Glu Ser
 385 390 395 400
 His Thr Leu Thr Tyr Pro Pro Glu Leu Trp Tyr Arg Lys Ile Cys Gly
 405 410 415
 Phe Asp Val Leu Tyr Pro Pro Glu Arg Tyr Gly His Val Leu Ser Gly
 420 425 430
 Trp Ile Cys Gly Glu Glu Ala Leu Val Met Glu Lys Cys Asp Asp Glu
 435 440 445
 Ala Val Ala Glu Ile Cys Thr Glu Met Leu Arg Gln Phe Thr Gly Asn
 450 455 460
 Pro Asn Ile Pro Lys Pro Arg Arg Ile Leu Arg Ser Ala Trp Gly Ser
 465 470 475 480
 Asn Pro Tyr Phe Arg Gly Ser Tyr Ser Tyr Thr Gln Val Gly Ser Ser
 485 490 495
 Gly Ala Asp Val Glu Lys Leu Ala Lys Pro Leu Pro Tyr Thr Glu Ser

500
Ser Lys Thr Ala Thr Lys
515 518

505

510

<210> 3193
<211> 642
<212> PRT
<213> Homo sapiens

<400> 3193
Gln Leu Gly Thr Arg Arg Cys Leu Arg Gly Asp Lys Val Thr Asn Ala
1 5 10 15
Met Gln Asp Phe Leu Val Thr Asn Leu Glu Pro Arg Phe Ile Glu Pro
20 25 30
Gln Thr Ala Asn Leu Ser Val Val Phe Lys Asp Ser Asn Ser Thr Thr
35 40 45
Pro Leu Ile Phe Val Leu Ser Pro Gly Thr Asp Pro Ala Ala Asp Leu
50 55 60
Tyr Lys Phe Ala Glu Glu Met Lys Phe Ser Lys Lys Leu Ser Ala Ile
65 70 75 80
Ser Leu Gly Gln Gly Gln Gly Pro Arg Ala Glu Ala Met Met Arg Ser
85 90 95
Ser Ile Glu Arg Gly Lys Trp Val Phe Phe Gln Asn Cys His Leu Ala
100 105 110
Pro Ser Trp Met Pro Ala Leu Glu Arg Leu Ile Glu His Ile Asn Pro
115 120 125
Asp Lys Val His Arg Asp Phe Arg Leu Trp Leu Thr Ser Leu Pro Ser
130 135 140
Asn Lys Phe Pro Val Ser Ile Leu Gln Asn Gly Ser Lys Met Thr Ile
145 150 155 160
Glu Pro Pro Arg Gly Val Arg Ala Asn Leu Leu Lys Ser Tyr Ser Ser
165 170 175
Leu Gly Glu Asp Phe Leu Asn Ser Cys His Lys Val Met Glu Phe Lys
180 185 190
Ser Leu Leu Ser Leu Cys Leu Phe His Gly Asn Ala Leu Glu Arg
195 200 205
Arg Lys Phe Gly Pro Leu Gly Phe Asn Ile Pro Tyr Glu Phe Thr Asp
210 215 220
Gly Asp Leu Arg Ile Cys Ile Ser Gln Leu Lys Met Phe Leu Asp Glu
225 230 235 240
Tyr Asp Asp Ile Pro Tyr Lys Val Leu Lys Tyr Thr Ala Gly Glu Ile
245 250 255
Asn Tyr Gly Gly Arg Val Thr Asp Asp Trp Asp Arg Arg Cys Ile Met
260 265 270
Asn Ile Leu Glu Asp Phe Tyr Asn Pro Asp Val Leu Ser Pro Glu His
275 280 285
Ser Tyr Ser Ala Ser Gly Ile Tyr His Gln Ile Pro Pro Thr Tyr Asp
290 295 300
Leu His Gly Tyr Leu Ser Tyr Ile Lys Ser Leu Pro Leu Asn Asp Met
305 310 315 320
Pro Glu Ile Phe Gly Leu His Asp Asn Ala Asn Ile Thr Phe Ala Gln
325 330 335
Asn Glu Thr Phe Ala Leu Leu Gly Thr Ile Ile Gln Leu Gln Pro Lys
340 345 350
Ser Ser Ser Ala Gly Ser Gln Gly Arg Glu Glu Ile Val Glu Asp Val
355 360 365
Thr Gln Asn Ile Leu Leu Lys Val Pro Glu Pro Ile Asn Leu Gln Trp
370 375 380
Val Met Ala Lys Tyr Pro Val Leu Tyr Glu Glu Ser Met Asn Thr Val
385 390 395 400
Leu Val Gln Glu Val Ile Arg Tyr Asn Arg Leu Leu Gln Val Ile Thr

```

      405      410      415
Gln Thr Leu Gln Asp Leu Leu Lys Ala Leu Lys Gly Leu Val Val Met
      420      425      430
Ser Ser Gln Leu Glu Leu Met Ala Ala Ser Leu Tyr Asn Asn Thr Val
      435      440      445
Pro Glu Leu Trp Ser Ala Lys Ala Tyr Pro Ser Leu Lys Pro Leu Ser
      450      455      460
Ser Trp Val Met Asp Leu Leu Gln Arg Leu Asp Phe Leu Gln Ala Trp
465      470      475      480
Ile Gln Asp Gly Ile Pro Ala Val Phe Trp Ile Ser Gly Phe Phe Phe
      485      490      495
Pro Gln Ala Phe Leu Thr Gly Thr Leu Gln Asn Phe Ala Arg Lys Phe
      500      505      510
Val Ile Ser Ile Asp Thr Ile Ser Phe Asp Phe Lys Val Met Phe Glu
      515      520      525
Ala Pro Ser Glu Leu Thr Gln Arg Pro Gln Val Gly Cys Tyr Ile His
      530      535      540
Gly Leu Phe Leu Glu Gly Ala Arg Trp Asp Pro Glu Ala Phe Gln Leu
545      550      555      560
Ala Glu Ser Gln Pro Lys Glu Leu Tyr Thr Glu Met Ala Val Ile Trp
      565      570      575
Leu Leu Pro Thr Pro Asn Arg Lys Ala Gln Asp Gln Asp Phe Tyr Leu
      580      585      590
Cys Pro Ile Tyr Lys Thr Leu Thr Arg Ala Gly Thr Leu Ser Thr Thr
      595      600      605
Gly His Ser Thr Asn Tyr Val Ile Ala Val Glu Ile Pro Thr His Gln
      610      615      620
Pro Gln Arg His Trp Ile Lys Arg Gly Val Ala Leu Ile Cys Ala Leu
625      630      635      640
Asp Tyr
642

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<210> 3194
<211> 341
<212> PRT
<213> Homo sapiens

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      <400> 3194
Asp Gly Trp Thr Pro Val His Ala Ala Val Asp Thr Gly Asn Val Asp
 1      5      10      15
Ser Leu Lys Leu Leu Met Tyr His Arg Ile Pro Ala His Gly Asn Ser
      20      25      30
Phe Asn Glu Glu Glu Ser Glu Ser Ser Val Phe Asp Leu Asp Gly Gly
      35      40      45
Glu Glu Ser Pro Glu Gly Ile Ser Lys Pro Val Val Pro Ala Asp Leu
      50      55      60
Ile Asn His Ala Asn Arg Glu Gly Trp Thr Ala Ala His Ile Ala Ala
65      70      75      80
Ser Lys Gly Phe Lys Asn Cys Leu Glu Ile Leu Cys Arg His Gly Gly
      85      90      95
Leu Glu Pro Glu Arg Arg Asp Lys Cys Asn Arg Thr Val His Asp Val
      100      105      110
Ala Thr Asp Asp Cys Lys His Leu Leu Glu Asn Leu Asn Ala Leu Lys
      115      120      125
Ile Pro Leu Arg Ile Ser Val Gly Glu Ile Glu Pro Ser Asn Tyr Gly
      130      135      140
Ser Asp Asp Leu Glu Cys Glu Asn Thr Ile Cys Ala Leu Asn Ile Arg
145      150      155      160
Lys Gln Thr Ser Trp Asp Asp Phe Ser Lys Ala Val Ser Gln Ala Leu
      165      170      175
Thr Asn His Phe Gln Ala Ile Ser Ser Asp Gly Trp Trp Ser Leu Glu

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```
<210> 3195
<211> 603
<212> PRT
<213> Homo sapiens
```

4896

260	265	270
His Gln Arg Ile His Ser Gly Glu Lys Pro Tyr Lys Cys Ser Glu Cys		
275	280	285
Gly Lys Ala Phe Thr His Arg Ser Thr Phe Val Leu His His Arg Ser		
290	295	300
His Thr Gly Glu Lys Pro Phe Val Cys Lys Glu Cys Gly Lys Ala Phe		
305	310	315
Arg Asp Arg Pro Gly Phe Ile Arg His Tyr Ile Ile His Thr Gly Glu		
	325	330
Lys Pro Tyr Glu Cys Ile Glu Cys Ile Glu Cys Gly Lys Ala Phe Asn		
	340	345
Arg Arg Ser Tyr Leu Thr Trp His Gln Gln Ile His Thr Gly Val Lys		
	355	360
Pro Phe Glu Cys Asn Glu Cys Gly Lys Ala Phe Cys Glu Ser Ala Asp		
	370	375
Leu Ile Gln His Tyr Ile Ile His Thr Gly Glu Lys Pro Tyr Lys Cys		
385	390	395
Met Glu Cys Gly Lys Ala Phe Asn Arg Arg Ser His Leu Lys Gln His		
	405	410
Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Ser Glu Cys Gly		
	420	425
Lys Ala Phe Thr His Cys Ser Thr Phe Val Leu His Lys Arg Thr His		
	435	440
Thr Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Ala Phe Ser		
	450	455
Asp Arg Ala Asp Leu Ile Arg His Phe Ser Ile His Thr Gly Glu Lys		
465	470	475
Pro Tyr Glu Cys Val Glu Cys Gly Lys Ala Phe Asn Arg Ser Ser His		
	485	490
Leu Thr Arg His Gln Gln Ile His Thr Gly Glu Lys Pro Tyr Glu Cys		
	500	505
Ile Gln Cys Gly Lys Ala Phe Cys Arg Ser Ala Asn Leu Ile Arg His		
	515	520
Ser Ile Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Ser Glu Cys Gly		
	530	535
Lys Ala Phe Asn Arg Gly Ser Ser Leu Thr His His Gln Arg Ile His		
545	550	555
Thr Gly Arg Asn Pro Thr Ile Val Thr Asp Val Gly Arg Pro Phe Met		
	565	570
Thr Ala Gln Thr Ser Val Asn Ile Gln Glu Leu Leu Leu Gly Lys Glu		
	580	585
Phe Leu Asn Ile Thr Thr Glu Glu Asn Leu Trp		
	595	600
		603

<210> 3196

<211> 378

<212> PRT

<213> Homo sapiens

<400> 3196

Val Gly Phe Trp Glu Arg Pro Leu Arg Ser Ser Arg Trp Phe Arg Arg		
1	5	10
Ser Leu Arg Arg Trp Glu Met Leu Ala Arg Ala Ala Arg Gly Thr Gly		
	20	25
Ala Leu Leu Arg Gly Ser Leu Leu Ala Ser Gly Arg Ala Pro Arg		
	35	40
Arg Ala Ser Ser Gly Leu Pro Arg Asn Thr Val Val Leu Phe Val Pro		
	50	55
Gln Gln Glu Ala Trp Val Val Glu Arg Met Gly Arg Phe His Arg Ile		
	65	70
Leu Glu Pro Gly Leu Asn Ile Leu Ile Pro Val Leu Asp Arg Ile Arg		
		75
		80


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<210> 3197
<211> 1189
<212> PRT
<213> Homo sapiens
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4898

130	135	140
Gln Ile Glu Leu Met	Glu Lys Ile Thr Arg	Asp Ser Ser Leu Glu Val
145	150	155
Leu His Glu Met Asp	Asp Tyr Gly Asn Thr	Pro Leu His Cys Ala Val
165	170	175
Glu Lys Asn Gln Ile	Glu Ser Val Lys Phe	Leu Leu Ser Arg Gly Ala
180	185	190
Asn Pro Asn Leu Arg	Asn Phe Asn Met Met	Ala Pro Leu His Ile Ala
195	200	205
Val Gln Gly Met Asn	Asn Glu Val Met Lys	Val Leu Leu Glu His Arg
210	215	220
Thr Ile Asp Val Asn	Leu Glu Gly Glu Asn	Gly Asn Thr Ala Val Ile
225	230	235
Ile Ala Cys Thr Thr	Asn Asn Ser Glu Ala	Leu Gln Ile Leu Leu Asn
245	250	255
Lys Gly Ala Lys Pro	Cys Lys Ser Asn Lys	Trp Gly Cys Phe Pro Ile
260	265	270
His Gln Ala Ala Phe	Ser Gly Ser Lys Glu	Cys Met Glu Ile Ile Leu
275	280	285
Arg Phe Gly Glu Glu	His Gly Tyr Ser Arg	Gln Leu His Ile Asn Phe
290	295	300
Met Asn Asn Gly Lys	Ala Thr Pro Leu His	Leu Ala Val Gln Asn Gly
305	310	315
Asp Leu Glu Met Ile	Lys Met Cys Leu Asp	Asn Gly Ala Gln Ile Asp
325	330	335
Pro Val Glu Lys Gly	Arg Cys Thr Ala Ile	His Phe Ala Ala Thr Gln
340	345	350
Gly Ala Thr Glu Ile	Val Lys Leu Met Ile	Ser Ser Tyr Ser Gly Ser
355	360	365
Val Asp Ile Val Asn	Thr Thr Asp Gly Cys	His Glu Thr Met Leu His
370	375	380
Arg Ala Ser Leu Phe	Asp His His Glu Leu	Ala Asp Tyr Leu Ile Ser
385	390	395
Val Gly Ala Asp Ile	Asn Lys Ile Asp Ser	Glu Gly Arg Ser Pro Leu
405	410	415
Ile Leu Ala Thr Ala	Ser Ala Ser Trp Asn	Ile Val Asn Leu Leu Leu
420	425	430
Ser Lys Gly Ala Gln	Val Asp Ile Lys Asp	Asn Phe Gly Arg Asn Phe
435	440	445
Leu His Leu Thr Val	Gln Gln Pro Tyr Gly	Leu Lys Asn Leu Arg Pro
450	455	460
Glu Phe Met Gln Met	Gln Gln Ile Lys Glu	Leu Val Met Asp Glu Asp
465	470	475
Asn Asp Gly Cys Thr	Pro Leu His Tyr Ala	Cys Arg Gln Gly Gly Pro
485	490	495
Gly Ser Val Asn Asn	Leu Leu Gly Phe Asn	Val Ser Ile His Ser Lys
500	505	510
Ser Lys Asp Lys Lys	Ser Pro Leu His Phe	Ala Ala Ser Tyr Gly Arg
515	520	525
Ile Asn Thr Cys Gln	Arg Leu Leu Gln Asp	Ile Ser Asp Thr Arg Leu
530	535	540
Leu Asn Glu Gly Asp	Leu His Gly Met Thr	Pro Leu His Leu Ala Ala
545	550	555
Lys Asn Gly His Asp	Lys Val Val Gln Leu	Leu Leu Lys Lys Gly Ala
565	570	575
Leu Phe Leu Ser Asp	His Asn Gly Trp Thr	Ala Leu His His Ala Ser
580	585	590
Met Gly Gly Tyr Thr	Gln Thr Met Lys Val	Ile Leu Asp Thr Asn Leu
595	600	605
Lys Cys Thr Asp Arg	Leu Asp Glu Asp Gly	Asn Thr Ala Leu His Phe
610	615	620
Ala Ala Arg Glu Gly	His Ala Lys Ala Val	Ala Leu Leu Leu Ser His
625	630	635
Asn Ala Asp Ile Val	Leu Asn Lys Gln Gln	Ala Ser Phe Leu His Leu

4900

1155 1160 1165
 Arg Asn Ser Arg Trp Asn Thr Val Leu Arg Ala Val Lys Ala Lys Thr
 1170 1175 1180
 His His Leu Glu Pro
 1185 1189

<210> 3198
 <211> 708
 <212> PRT
 <213> Homo sapiens

<400> 3198
 Lys Glu Lys Ser Leu His His Val Asp Gln Arg Pro Pro Leu Trp His
 1 5 10 15
 Pro Gly Arg Pro Gly Thr Ser Gln Ser Ala Ala Met Asn Ala Ser Ser
 20 25 30
 Glu Gly Glu Ser Phe Ala Gly Ser Val Gln Ile Pro Gly Gly Thr Thr
 35 40 45
 Val Leu Val Glu Leu Thr Pro Asp Ile His Ile Cys Gly Ile Cys Lys
 50 55 60
 Gln Gln Phe Asn Asn Leu Asp Ala Phe Val Ala His Lys Gln Ser Gly
 65 70 75 80
 Cys Gln Leu Thr Gly Thr Ser Ala Ala Ala Pro Ser Thr Val Gln Phe
 85 90 95
 Val Ser Glu Glu Thr Val Pro Ala Thr Gln Thr Gln Thr Thr Thr Arg
 100 105 110
 Thr Ile Thr Ser Glu Thr Gln Thr Ile Thr Val Ser Ala Pro Glu Phe
 115 120 125
 Val Phe Glu His Gly Tyr Gln Thr Tyr Leu Pro Thr Glu Ser Asn Glu
 130 135 140
 Asn Gln Thr Ala Thr Val Ile Ser Leu Pro Ala Lys Ser Arg Thr Lys
 145 150 155 160
 Lys Pro Thr Thr Pro Pro Ala Gln Lys Arg Leu Asn Cys Cys Tyr Pro
 165 170 175
 Gly Cys Gln Phe Lys Thr Ala Tyr Gly Met Lys Asp Met Glu Arg His
 180 185 190
 Leu Lys Ile His Thr Gly Asp Lys Pro His Lys Cys Glu Val Cys Gly
 195 200 205
 Lys Cys Phe Ser Arg Lys Asp Lys Leu Lys Thr His Met Arg Cys His
 210 215 220
 Thr Gly Val Lys Pro Tyr Lys Cys Lys Thr Cys Asp Tyr Ala Ala Ala
 225 230 235 240
 Asp Ser Ser Ser Leu Asn Lys His Leu Arg Ile His Ser Asp Glu Arg
 245 250 255
 Pro Phe Lys Cys Gln Ile Cys Pro Tyr Ala Ser Arg Asn Ser Ser Gln
 260 265 270
 Leu Thr Val His Leu Arg Ser His Thr Gly Asp Ala Pro Phe Gln Cys
 275 280 285
 Trp Leu Cys Ser Ala Lys Phe Lys Ile Ser Ser Asp Leu Lys Arg His
 290 295 300
 Met Arg Val His Ser Gly Glu Lys Pro Phe Lys Cys Glu Phe Cys Asn
 305 310 315 320
 Val Arg Cys Thr Met Lys Gly Asn Leu Lys Ser His Ile Arg Ile Lys
 325 330 335
 His Ser Gly Asn Asn Phe Lys Cys Pro His Cys Ala Phe Leu Gly Asp
 340 345 350
 Ser Lys Ala Thr Leu Arg Lys His Ser Arg Val His Gln Ser Glu His
 355 360 365
 Arg Glu Lys Cys Ser Glu Cys Ser Tyr Ser Cys Ser Ser Lys Ala Ala
 370 375 380
 Leu Arg Ile His Glu Arg Ile His Cys Thr Val Arg Pro Phe Lys Cys

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385          390          395          400
Asn Tyr Cys Ser Phe Asp Ser Lys Gln Pro Ser Asn Leu Ser Lys His
          405          410          415
Met Lys Lys Phe His Gly Asp Met Val Lys Thr Glu Ala Leu Glu Arg
          420          425          430
Lys Asp Thr Gly Arg Gln Ser Ser Arg Gln Val Ala Lys Leu Asp Ala
          435          440          445
Lys Lys Ser Phe His Cys Asp Ile Cys Asp Ala Ser Phe Met Arg Glu
          450          455          460
Asp Ser Leu Arg Ser His Lys Arg Gln His Ser Glu Tyr Asn Glu Ser
          465          470          475          480
Lys Asn Ser Asp Val Thr Val Leu Gln Phe Gln Ile Asp Pro Ser Lys
          485          490          495
Gln Pro Ala Thr Pro Leu Thr Val Gly His Leu Gln Val Pro Leu Gln
          500          505          510
Pro Ser Gln Val Pro Gln Phe Ser Glu Gly Arg Val Lys Ile Ile Val
          515          520          525
Gly His Gln Val Pro Gln Ala Asn Thr Ile Val Gln Ala Ala Ala Ala
          530          535          540
Ala Val Asn Ile Val Pro Pro Ala Leu Val Ala Gln Asn Pro Glu Glu
          545          550          555          560
Leu Pro Gly Asn Ser Arg Leu Gln Ile Leu Arg Gln Val Ser Leu Ile
          565          570          575
Ala Pro Pro Gln Ser Ser Arg Cys Pro Ser Glu Ala Gly Ala Met Thr
          580          585          590
Gln Pro Ala Val Leu Leu Thr Thr His Glu Gln Thr Asp Gly Ala Thr
          595          600          605
Leu His Gln Thr Leu Ile Pro Thr Ala Ser Gly Gly Pro Gln Glu Gly
          610          615          620
Ser Gly Asn Gln Thr Phe Ile Thr Ser Ser Gly Ile Thr Cys Thr Asp
          625          630          635          640
Phe Glu Gly Leu Asn Ala Leu Ile Gln Glu Gly Thr Ala Glu Val Thr
          645          650          655
Val Val Ser Asp Gly Gly Gln Asn Ile Ala Val Ala Thr Thr Ala Pro
          660          665          670
Pro Val Phe Ser Ser Ser Ser Gln Gln Glu Leu Pro Lys Gln Thr Tyr
          675          680          685
Ser Ile Ile Gln Gly Ala Ala His Pro Ala Leu Leu Cys Pro Ala Asp
          690          695          700
Ser Ile Pro Asp
705          708

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<210> 3199
<211> 745
<212> PRT
<213> Homo sapiens

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<400> 3199
Gln Ser Phe His Ser Met Glu Gly Asp Pro Ser Gly Leu Pro Leu Leu
 1          5          10          15
Ala Arg Gly Ala Ser Cys Tyr Ser Leu Ile Cys Pro Cys Pro Arg Pro
          20          25          30
Ala Asp Trp Ser Ile Leu Gln Gly Thr Asp Trp Ser Ile Leu Gln Ser
          35          40          45
Ala Asp Trp Cys Ile Tyr Asn Pro Leu Ala Arg His Arg Ala Leu Thr
          50          55          60
Gly Val Phe Leu Gln Ser Ala Asp Trp Cys Thr Tyr Asn Pro Leu Ala
          65          70          75          80
Arg Gln Lys Ser Ser Pro Ser Pro His Ser Thr Gln Glu Val Gln Leu
          85          90          95
Ala Ser Pro Leu Thr Arg Arg Pro Asn Lys Lys Asp Ser Ala Glu Arg

```

100	105	110
Asn His Arg Pro Ala Arg Glu Gly Ser Val Ala Gln Arg Gln Pro Asn		
115	120	125
Pro Ala Ala Leu Glu Lys Ala Glu Pro Ala Ala Arg Lys Arg Asn Glu		
130	135	140
Arg Glu Gly Gly Gly Ser Gln Glu Pro Gly Arg Glu His Ser Leu Glu		
145	150	155
Lys Gly Tyr Trp Ala Pro Gly Leu Gly Pro Asp Pro Ser Met Cys Ser		
165	170	175
Lys Gln Val Asp Pro Ser Glu Gly Ala Ser Ser His Leu Lys His Arg		
180	185	190
Gly Gly Ser Arg Ala Ala His Leu Glu Val Arg Arg Leu Leu Arg Arg		
195	200	205
Leu Val Gly Ala Leu Val Ala Glu Ala Gly Phe Cys Tyr Val Gln Val		
210	215	220
Ala Glu Gly Gln Arg Val Val Gly Val Leu Glu Val Ala Glu Ala Ala		
225	230	235
Ala Ala Pro Val Gln His Glu Pro Thr Ala Ala Val Ala Thr Gln Ser		
245	250	255
Arg Trp Phe Pro Arg Gly Thr Arg Pro Gly Leu Cys Ser Leu Pro Ile		
260	265	270
Ala Val Ala Ala Leu Leu Cys Pro Gly Ser Gly Pro Gly Ala Gln Ser		
275	280	285
Gly Leu Glu Phe Val Glu Arg Pro Pro Pro Ser Pro Leu Ala Val Val		
290	295	300
Leu Ala Arg Trp Pro Leu Pro Pro Pro Ala Gly Arg Cys Pro Arg Asp		
305	310	315
Ala Pro Glu Ala Arg Val Pro Glu Lys Ala Arg Ala Glu Gly Ser Glu		
325	330	335
Arg Glu Asn Asn Tyr Gly Cys Gly Val Val Gly Gly Glu Met Thr Thr		
340	345	350
Leu Val Leu Asp Asn Gly Ala Tyr Asn Ala Lys Ile Gly Tyr Ser His		
355	360	365
Glu Asn Val Ser Val Ile Pro Asn Cys Gln Phe Arg Ser Lys Thr Ala		
370	375	380
Arg Leu Lys Thr Phe Thr Ala Asn Gln Ile Asp Glu Ile Lys Asp Pro		
385	390	395
Ser Gly Leu Phe Tyr Ile Leu Pro Phe Gln Lys Gly Tyr Leu Val Asn		
405	410	415
Trp Asp Val Gln Arg Gln Val Trp Asp Tyr Leu Phe Gly Lys Glu Met		
420	425	430
Tyr Gln Val Asp Phe Leu Asp Thr Asn Ile Ile Ile Thr Glu Pro Tyr		
435	440	445
Phe Asn Phe Thr Ser Ile Gln Glu Ser Met Asn Glu Ile Leu Phe Glu		
450	455	460
Glu Tyr Gln Phe Gln Ala Val Leu Arg Val Asn Ala Gly Ala Leu Ser		
465	470	475
Ala His Arg Tyr Phe Arg Asp Asn Pro Ser Glu Leu Cys Cys Ile Ile		
485	490	495
Val Asp Ser Gly Tyr Ser Phe Thr His Ile Val Pro Tyr Cys Arg Ser		
500	505	510
Lys Lys Lys Lys Glu Ala Ile Ile Arg Ile Asn Val Gly Gly Lys Leu		
515	520	525
Leu Thr Asn His Leu Lys Glu Ile Ile Ser Tyr Arg Gln Leu His Val		
530	535	540
Met Asp Glu Thr His Val Ile Asn Gln Val Lys Glu Asp Val Cys Tyr		
545	550	555
Val Ser Gln Asp Phe Tyr Arg Asp Met Asp Ile Ala Lys Leu Lys Gly		
565	570	575
Glu Glu Asn Thr Val Met Ile Asp Tyr Val Leu Pro Asp Phe Ser Thr		
580	585	590
Ile Lys Lys Gly Phe Cys Lys Pro Arg Glu Glu Met Val Leu Ser Gly		
595	600	605
Lys Tyr Lys Ser Gly Glu Gln Ile Leu Arg Leu Ala Asn Glu Arg Phe		

610	615	620
Ala Val Pro Glu Ile Leu Phe Asn Pro Ser Asp Ile Gly Ile Gln Glu		
625	630	635
Met Gly Ile Pro Glu Ala Ile Val Tyr Ser Ile Gln Asn Leu Pro Glu		
	645	650
Glu Met Gln Pro His Phe Phe Lys Asn Ile Val Leu Thr Gly Gly Asn		
	660	665
Ser Leu Phe Pro Gly Phe Arg Asp Arg Val Tyr Ser Glu Val Arg Cys		
	675	680
Leu Thr Pro Thr Asp Tyr Asp Val Ser Val Val Leu Pro Glu Asn Pro		
	690	695
Ile Thr Tyr Ala Trp Glu Gly Gly Lys Leu Ile Ser Glu Asn Asp Asp		
705	710	715
Phe Glu Asp Met Val Val Thr Arg Glu Asp Tyr Glu Glu Asn Gly His		
	725	730
Ser Val Cys Glu Glu Lys Phe Asp Ile		
	740	745

<210> 3200
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 3200

Ala Val Gln Arg Ile Arg His Glu Met Asn Ile Phe Arg Leu Thr Gly		
1	5	10
Asp Leu Ser His Leu Ala Ala Ile Val Ile Leu Leu Leu Lys Ile Trp		
	20	25
Lys Thr Arg Ser Cys Ala Gly Ile Ser Gly Lys Ser Gln Leu Leu Phe		
	35	40
Ala Leu Val Phe Thr Thr Arg Tyr Leu Asp Leu Phe Thr Ser Phe Ile		
	50	55
Ser Leu Tyr Asn Thr Ser Met Lys Val Trp Tyr Ala Ile His Arg Asn		
	65	70
Val Phe His Leu Gln Cys Thr Gly Leu Trp Thr Leu Asn Leu Cys Gln		
	85	90
Leu Cys Ile Phe Asn		
	100	101

<210> 3201
 <211> 156
 <212> PRT
 <213> Homo sapiens

<400> 3201

Ile Arg His Glu Gly Arg Gly Gln Arg Gly Lys Met Glu Leu Val Gln		
1	5	10
Val Leu Lys Arg Gly Leu Gln Gln Ile Thr Gly His Gly Gly Leu Arg		
	20	25
Gly Tyr Leu Arg Val Phe Phe Arg Thr Asn Asp Ala Lys Val Gly Thr		
	35	40
Leu Val Gly Glu Asp Lys Tyr Gly Asn Lys Tyr Tyr Glu Asp Asn Lys		
	50	55
Gln Phe Phe Gly Arg His Arg Trp Val Val Tyr Thr Thr Glu Met Asn		
	65	70
Gly Lys Asn Thr Phe Trp Asp Val Asp Gly Ser Met Val Pro Pro Glu		
	85	90
Trp His Arg Trp Leu His Ser Met Thr Asp Asp Pro Pro Thr Thr Lys		
		95

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      100      105      110
Pro Leu Thr Ala Arg Lys Phe Ile Trp Thr Asn His Lys Phe Asn Val
      115      120      125
Thr Gly Thr Pro Glu Gln Tyr Val Pro Tyr Ser Thr Thr Arg Lys Lys
      130      135      140
Ile Gln Glu Trp Ile Pro Pro Ser Thr Pro Tyr Lys
145      150      155 156

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<210> 3202
<211> 231
<212> PRT
<213> Homo sapiens

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      <400> 3202
Asn Ser Ser Gln Arg Ile Met Ala Thr His Ala Leu Glu Ile Ala Gly
  1      5      10      15
Leu Phe Leu Gly Gly Val Gly Met Val Gly Thr Val Ala Val Thr Val
      20      25      30
Met Pro Gln Trp Arg Val Ser Ala Phe Ile Glu Asn Asn Ile Val Val
      35      40      45
Phe Glu Asn Phe Trp Glu Gly Leu Trp Met Asn Cys Val Arg Gln Ala
      50      55      60
Asn Ile Arg Met Gln Cys Lys Ile Tyr Asp Ser Leu Leu Ala Leu Ser
      65      70      75      80
Pro Asp Leu Gln Ala Ala Arg Gly Leu Met Cys Ala Ala Ser Val Met
      85      90      95
Ser Phe Leu Ala Phe Met Met Ala Ile Leu Gly Met Lys Cys Thr Arg
      100      105      110
Cys Thr Gly Asp Asn Glu Lys Val Lys Ala His Ile Leu Leu Thr Ala
      115      120      125
Gly Ile Ile Phe Ile Ile Thr Gly Met Val Val Leu Ile Pro Val Ser
      130      135      140
Trp Val Ala Asn Ala Ile Ile Arg Asp Phe Tyr Asn Ser Ile Val Asn
145      150      155      160
Val Ala Gln Lys Arg Glu Leu Gly Glu Ala Leu Tyr Leu Gly Trp Thr
      165      170      175
Thr Ala Leu Val Leu Ile Val Gly Gly Ala Leu Phe Cys Cys Val Phe
      180      185      190
Cys Cys Asn Glu Lys Ser Ser Ser Tyr Arg Tyr Ser Ile Pro Ser His
      195      200      205
Arg Thr Thr Gln Lys Ser Tyr His Thr Gly Lys Lys Ser Pro Ser Val
      210      215      220
Tyr Ser Arg Ser Gln Tyr Val
225      230 231

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<210> 3203
<211> 157
<212> PRT
<213> Homo sapiens

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```

      <400> 3203
Lys Tyr Arg Tyr Arg Arg Pro Tyr Pro Val Met Arg Lys Ile Cys Gln
  1      5      10      15
Val Gly Pro Ala Gly Leu Ala Phe Ile Leu Asn Ile Ser Pro Val Ala
      20      25      30
His Arg Val Ala Leu Cys His Leu Ala Gly Cys Gln Glu Gln Ala Ala
      35      40      45
Trp Tyr His Thr Leu Gln Ile Leu Phe Phe Leu Val Ser Ala Tyr Phe

```


50	55	60
Phe Ser Cys Pro Val Pro Glu Lys Tyr Phe Pro Gly Ser Cys Asp Ile		
65	70	75
Val Gly His Gly His Gln Ile Phe His Ala Phe Leu Ser Ile Cys Thr		80
	85	90
Leu Ser Gln Leu Glu Ala Ile Leu Leu Asp Tyr Gln Gly Arg Gln Glu		95
	100	105
Ile Phe Leu Gln Arg His Gly Pro Leu Ser Val His Met Ala Cys Leu		110
	115	120
Ser Phe Phe Phe Leu Ala Ala Cys Ser Ala Ala Thr Ala Ala Leu Leu		125
	130	135
Arg His Lys Val Lys Ala Arg Leu Thr Lys Lys Asp Ser		140
145	150	155
		157

<210> 3204
 <211> 380
 <212> PRT
 <213> Homo sapiens

<400> 3204

Pro Glu Ser Ala Pro Leu Pro Ala Phe Ile Ser Ser Arg Ile Leu Pro		
1	5	10
Ala Ala Trp Arg Asn Trp Cys Ser Tyr Val Val Thr Arg Thr Ile Ser		15
	20	25
Cys His Val Gln Asn Gly Thr Tyr Leu Gln Arg Val Leu Gln Asn Cys		30
	35	40
Pro Trp Pro Met Ser Cys Pro Gly Ser Ser Tyr Arg Thr Val Val Arg		45
	50	55
Pro Thr Tyr Lys Val Met Tyr Lys Ile Val Thr Ala Arg Glu Trp Arg		60
	65	70
Cys Cys Pro Gly His Ser Arg Val Ser Cys Glu Glu Val Ala Gly Ser		75
	85	90
Ser Ala Ser Leu Glu Pro Met Trp Ser Gly Ser Thr Met Arg Arg Met		95
	100	105
Ala Leu Arg Pro Thr Ala Phe Ser Gly Cys Leu Asn Cys Ser Lys Val		110
	115	120
Ser Glu Leu Thr Glu Arg Leu Lys Val Leu Glu Ala Lys Met Thr Met		125
	130	135
Leu Thr Val Ile Glu Gln Pro Val Pro Pro Thr Pro Ala Thr Pro Glu		140
	145	150
Asp Pro Ala Pro Leu Trp Gly Pro Pro Pro Ala Gln Gly Ser Pro Gly		155
	165	170
Asp Gly Gly Leu Gln Asp Gln Val Gly Ala Trp Gly Leu Pro Gly Pro		175
	180	185
Thr Gly Pro Lys Gly Asp Ala Gly Ser Arg Gly Pro Met Gly Met Arg		190
	195	200
Gly Pro Pro Gly Asp Pro Leu Leu Ser Asn Thr Phe Thr Glu Thr Asn		205
	210	215
Asn His Trp Pro Gln Gly Pro Thr Gly Pro Pro Gly Pro Pro Gly Pro		220
	225	230
Met Gly Pro Pro Gly Pro Pro Gly Pro Thr Gly Val Pro Gly Ser Pro		235
	245	250
Gly His Ile Gly Pro Pro Gly Pro Thr Gly Pro Lys Gly Ile Ser Gly		255
	260	265
His Pro Gly Glu Lys Gly Glu Arg Gly Leu Arg Gly Glu Pro Gly Pro		270
	275	280
Gln Gly Ser Ala Gly Gln Arg Gly Glu Pro Gly Pro Lys Gly Asp Pro		285
	290	295
Gly Glu Lys Ser His Trp Gly Glu Gly Leu His Gln Leu Arg Glu Ala		300
	305	310
Leu Lys Ile Leu Ala Glu Arg Val Leu Ile Leu Glu Thr Met Ile Gly		315
		320

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<210> 3205
<211> 386
<212> PRT
<213> Homo sapiens
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4907

370
Ser Ile
385 386

375

380

<210> 3206
<211> 1400
<212> PRT
<213> Homo sapiens

<400> 3206

Cys	Leu	Val	Asp	Ser	Lys	Leu	Trp	Lys	Gly	Ala	Arg	Ser	Val	Tyr	His
1				5					10					15	
Gln	Leu	Phe	Met	Ser	Ser	Leu	Leu	Met	Asp	Leu	Lys	Tyr	Lys	Lys	Leu
			20					25					30		
Phe	Ala	Val	Arg	Phe	Ala	Lys	Asn	Tyr	Glu	Arg	Leu	Gln	Ser	Asp	Tyr
		35					40					45			
Val	Thr	Asp	Asp	His	Asp	Arg	Glu	Phe	Ser	Val	Ala	Asp	Leu	Ser	Val
	50					55					60				
Gln	Ile	Phe	Thr	Val	Pro	Ser	Leu	Ala	Arg	Met	Leu	Ile	Thr	Glu	Glu
65					70					75					80
Asn	Leu	Met	Ser	Ile	Ile	Lys	Thr	Phe	Met	Asp	His	Leu	Arg	His	
				85					90					95	
Arg	Asp	Ala	Gln	Gly	Arg	Phe	Gln	Phe	Glu	Arg	Tyr	Thr	Ala	Leu	Gln
		100						105					110		
Ala	Phe	Lys	Phe	Arg	Arg	Val	Gln	Ser	Leu	Ile	Leu	Asp	Leu	Lys	Tyr
		115					120					125			
Val	Leu	Ile	Ser	Lys	Pro	Thr	Glu	Trp	Ser	Asp	Glu	Leu	Arg	Gln	Lys
	130					135					140				
Phe	Leu	Glu	Gly	Phe	Asp	Ala	Phe	Leu	Glu	Leu	Lys	Cys	Met	Gln	
145					150					155				160	
Gly	Met	Asp	Pro	Ile	Thr	Arg	Gln	Val	Gly	Gln	His	Ile	Glu	Met	Glu
			165						170					175	
Pro	Glu	Trp	Glu	Ala	Ala	Phe	Thr	Leu	Gln	Met	Lys	Leu	Thr	His	Val
			180					185					190		
Ile	Ser	Met	Met	Gln	Asp	Trp	Cys	Ala	Ser	Asp	Glu	Lys	Val	Leu	Ile
	195						200					205			
Glu	Ala	Tyr	Lys	Lys	Cys	Leu	Ala	Val	Leu	Met	Gln	Cys	His	Gly	Gly
	210					215					220				
Tyr	Thr	Asp	Gly	Glu	Gln	Pro	Ile	Thr	Leu	Ser	Ile	Cys	Gly	His	Ser
225					230					235				240	
Val	Glu	Thr	Ile	Arg	Tyr	Cys	Val	Ser	Gln	Glu	Lys	Val	Ser	Ile	His
			245						250					255	
Leu	Pro	Val	Ser	Arg	Leu	Leu	Ala	Gly	Leu	His	Val	Leu	Leu	Ser	Lys
			260					265					270		
Ser	Glu	Val	Ala	Tyr	Lys	Phe	Pro	Glu	Leu	Leu	Pro	Leu	Ser	Glu	Leu
		275					280					285			
Ser	Pro	Pro	Met	Leu	Ile	Glu	His	Pro	Leu	Arg	Cys	Leu	Val	Leu	Cys
	290					295					300				
Ala	Gln	Val	His	Ala	Gly	Met	Trp	Arg	Arg	Asn	Gly	Phe	Ser	Leu	Val
305					310					315				320	
Asn	Gln	Ile	Tyr	Tyr	Tyr	His	Asn	Val	Lys	Cys	Arg	Arg	Glu	Met	Phe
			325						330					335	
Asp	Lys	Asp	Val	Val	Met	Leu	Gln	Thr	Gly	Val	Ser	Met	Met	Asp	Pro
			340					345					350		
Asn	His	Phe	Leu	Met	Ile	Met	Leu	Ser	Arg	Phe	Glu	Leu	Tyr	Gln	Ile
	355						360					365			
Phe	Ser	Thr	Pro	Asp	Tyr	Gly	Lys	Arg	Phe	Ser	Ser	Glu	Ile	Thr	His
	370					375					380				
Lys	Asp	Val	Val	Gln	Gln	Asn	Asn	Thr	Leu	Ile	Glu	Glu	Met	Leu	Tyr
385					390					395				400	
Leu	Ile	Ile	Met	Leu	Val	Gly	Glu	Arg	Phe	Ser	Pro	Gly	Val	Gly	Gln

4909

915	920	925
Pro Glu Gly Phe Arg Pro Asp Phe Arg Pro Lys Ile Pro Tyr Ser Glu		
930	935	940
Ser Ile Lys Glu Met Leu Thr Thr Phe Gly Thr Ala Thr Tyr Lys Val		
945	950	955
Gly Leu Lys Val His Pro Asn Glu Glu Asp Pro Arg Val Pro Ile Met		960
	965	970
Cys Trp Gly Ser Cys Ala Tyr Thr Ile Gln Ser Ile Glu Arg Ile Leu		975
	980	985
Ser Asp Glu Asp Lys Pro Leu Phe Gly Pro Leu Pro Cys Arg Leu Asp		990
	995	1000
Asp Cys Leu Arg Ser Leu Thr Arg Phe Ala Ala Ala His Trp Thr Val		1005
1010	1015	1020
Ala Ser Val Ser Val Val Gln Gly His Phe Cys Lys Pro Phe Ala Ser		
1025	1030	1035
Leu Val Pro Asn Asp Ser His Glu Glu Leu Pro Cys Ile Leu Asp Ile		1040
	1045	1050
Asp Met Phe His Leu Leu Val Gly Leu Val Leu Ala Phe Pro Ala Leu		1055
	1060	1065
Gln Cys Gln Asp Phe Ser Gly Ile Ser Leu Gly Thr Gly Asp Leu His		1070
	1075	1080
Ile Phe His Leu Val Thr Met Ala His Ile Ile Gln Ile Leu Leu Thr		1085
1090	1095	1100
Ser Cys Thr Glu Glu Asn Gly Met Asp Gln Glu Asn Pro Pro Cys Glu		
1105	1110	1115
Glu Glu Ser Ala Val Leu Ala Leu Tyr Lys Thr Leu His Gln Tyr Thr		1120
	1125	1130
Gly Ser Ala Leu Lys Glu Ile Pro Ser Gly Trp His Leu Trp Arg Ser		1135
	1140	1145
Val Arg Ala Gly Ile Met Pro Phe Leu Lys Cys Ser Ala Leu Phe Phe		1150
	1155	1160
His Tyr Leu Asn Gly Val Pro Ser Pro Pro Asp Ile Gln Val Pro Gly		1165
1170	1175	1180
Thr Ser His Phe Glu His Leu Cys Ser Tyr Leu Ser Leu Pro Asn Asn		
1185	1190	1195
Leu Ile Cys Leu Phe Gln Glu Asn Ser Glu Ile Met Asn Ser Leu Ile		1200
	1205	1210
Glu Ser Trp Cys Arg Asn Ser Glu Val Lys Arg Tyr Leu Glu Gly Glu		1215
	1220	1225
Arg Asp Ala Ile Arg Tyr Pro Arg Glu Ser Asn Lys Leu Ile Asn Leu		1230
	1235	1240
Pro Glu Asp Tyr Ser Ser Leu Ile Asn Gln Ala Ser Asn Phe Ser Cys		1245
	1250	1255
Pro Lys Ser Gly Gly Asp Lys Ser Arg Ala Pro Thr Leu Cys Leu Val		1260
1265	1270	1275
Cys Gly Ser Leu Leu Cys Ser Gln Ser Tyr Cys Cys Gln Thr Glu Leu		1280
	1285	1290
Glu Gly Glu Asp Val Gly Ala Cys Thr Ala His Thr Tyr Ser Cys Gly		1295
	1300	1305
Ser Gly Val Gly Ile Phe Leu Arg Val Arg Glu Cys Gln Val Leu Phe		1310
	1315	1320
Leu Ala Gly Lys Thr Lys Gly Cys Phe Tyr Ser Pro Pro Tyr Leu Asp		1325
	1330	1335
Asp Tyr Gly Glu Thr Asp Gln Gly Leu Arg Arg Gly Asn Pro Leu His		1340
1345	1350	1355
Leu Cys Lys Glu Arg Phe Lys Lys Ile Gln Lys Leu Trp His Gln His		1360
	1365	1370
Ser Val Thr Glu Glu Ile Gly His Ala Gln Glu Ala Asn Gln Thr Leu		1375
	1380	1385
Val Gly Ile Asp Trp Gln His Leu		1390
1395	1400	

<210> 3207
 <211> 305
 <212> PRT
 <213> Homo sapiens

<400> 3207
 Gln Leu Ser Pro Ser Gln Ala Pro Ala Gly Ala Gln Glu Val Ala Arg
 1 5 10 15
 Arg Val Thr Val Gly Ser Ala Ser His Gly Gly Arg Arg Ser Thr Met
 20 25 30
 Ala Thr Thr Val Ser Thr Gln Arg Gly Pro Val Tyr Ile Gly Glu Leu
 35 40 45
 Pro Gln Asp Phe Leu Arg Ile Thr Pro Thr Gln Gln Gln Arg Gln Val
 50 55 60
 Gln Leu Asp Ala Gln Ala Gln Gln Leu Gln Tyr Gly Gly Ala Val
 65 70 75 80
 Gly Thr Val Gly Arg Leu Asn Ile Thr Val Val Gln Ala Lys Leu Ala
 85 90 95
 Lys Asn Tyr Gly Met Thr Arg Met Asp Pro Tyr Cys Arg Leu Arg Leu
 100 105 110
 Gly Tyr Ala Val Tyr Glu Thr Pro Thr Ala His Asn Gly Ala Lys Asn
 115 120 125
 Pro Arg Trp Asn Lys Val Ile His Cys Thr Val Pro Pro Gly Val Asp
 130 135 140
 Ser Phe Tyr Leu Glu Ile Phe Asp Glu Arg Ala Phe Ser Met Asp Asp
 145 150 155 160
 Arg Ile Ala Trp Thr His Ile Thr Ile Pro Glu Ser Leu Arg Gln Gly
 165 170 175
 Lys Val Glu Asp Lys Trp Tyr Ser Leu Ser Gly Arg Gln Gly Asp Asp
 180 185 190
 Lys Glu Gly Met Ile Asn Leu Val Met Ser Tyr Ala Leu Leu Pro Ala
 195 200 205
 Ala Met Val Met Pro Pro Gln Pro Val Val Leu Met Pro Thr Val Tyr
 210 215 220
 Gln Gln Gly Val Gly Tyr Val Pro Ile Thr Gly Met Pro Ala Val Cys
 225 230 235 240
 Ser Pro Gly Met Val Pro Val Ala Leu Pro Pro Ala Ala Val Asn Ala
 245 250 255
 Gln Pro Arg Cys Ser Glu Glu Asp Leu Lys Ala Ile Gln Asp Met Phe
 260 265 270
 Pro Asn Met Asp Gln Glu Val Ile Arg Ser Val Leu Glu Ala Gln Arg
 275 280 285
 Gly Asn Lys Asp Ala Ala Ile Asn Ser Leu Leu Gln Met Gly Glu Glu
 290 295 300
 Pro
 305

<210> 3208
 <211> 380
 <212> PRT
 <213> Homo sapiens

<400> 3208
 Leu Glu Arg Thr Pro Ala Ser Ala Asp Met Ala Trp Thr Lys Tyr Gln
 1 5 10 15
 Leu Phe Leu Ala Gly Leu Met Leu Val Thr Gly Ser Ile Asn Thr Leu
 20 25 30
 Ser Ala Lys Trp Ala Asp Asn Phe Met Ala Glu Gly Cys Gly Gly Ser
 35 40 45
 Lys Glu His Ser Phe Gln His Pro Phe Leu Gln Ala Val Gly Met Phe

50	55	60
Leu Gly Glu Phe Ser Cys	Leu Ala Ala Phe Tyr	Leu Leu Arg Cys Arg
65	70	75
Ala Ala Gly Gln Ser Asp	Ser Ser Val Asp Pro	Gln Gln Pro Phe Asn
85	90	95
Pro Leu Leu Phe Leu Pro	Pro Ala Leu Cys Asp Met	Thr Gly Thr Ser
100	105	110
Leu Met Tyr Val Ala Leu	Asn Met Thr Ser Ala Ser	Ser Phe Gln Met
115	120	125
Leu Arg Gly Ala Val Ile	Ile Phe Thr Gly Leu Phe	Ser Val Ala Phe
130	135	140
Leu Gly Arg Arg Leu Val	Leu Ser Gln Trp Leu Gly	Ile Leu Ala Thr
145	150	155
Ile Ala Gly Leu Val Val	Val Gly Leu Ala Asp Leu	Leu Ser Lys His
165	170	175
Asp Ser Gln His Lys Leu	Ser Glu Val Ile Thr Gly	Asp Leu Leu Ile
180	185	190
Ile Met Ala Gln Ile Ile	Val Ala Ile Gln Met Val	Leu Glu Glu Lys
195	200	205
Phe Val Tyr Lys His Asn	Val His Pro Leu Arg Ala	Val Gly Thr Glu
210	215	220
Gly Leu Phe Gly Phe Val	Ile Leu Ser Leu Leu Val	Pro Met Tyr
225	230	235
Tyr Ile Pro Ala Gly Ser	Phe Ser Gly Asn Pro Arg	Gly Thr Leu Glu
245	250	255
Asp Ala Leu Asp Ala Phe	Cys Gln Val Gly Gln Gln	Pro Leu Ile Ala
260	265	270
Val Ala Leu Leu Gly Asn	Ile Ser Ser Ile Ala Phe	Phe Asn Phe Ala
275	280	285
Gly Ile Ser Val Thr Lys	Glu Leu Ser Ala Thr Thr	Arg Met Val Leu
290	295	300
Asp Ser Leu Arg Thr Val	Val Ile Trp Ala Leu Ser	Leu Ala Leu Gly
305	310	315
Trp Glu Ala Phe His Ala	Leu Gln Ile Leu Gly Phe	Leu Ile Leu Leu
325	330	335
Ile Gly Thr Ala Leu Tyr	Asn Gly Leu His Arg Pro	Leu Leu Gly Arg
340	345	350
Leu Ser Arg Gly Arg Pro	Leu Ala Glu Glu Ser Glu	Gln Glu Arg Leu
355	360	365
Leu Gly Gly Thr Arg Thr	Pro Ile Asn Asp Ala Ser	
370	375	380

<210> 3209

<211> 632

<212> PRT

<213> Homo sapiens

<400> 3209

Ala Lys Val Val Ser Leu	Lys Glu Phe Ser Cys Phe	Trp Arg Arg Glu
1	5	10
Lys Pro Val Ser Ser Leu	Ser Ser Leu Gln Val Lys	Ala Glu Ala Ser
20	25	30
Trp Asp Ser Ala Val His	Gly Cys Pro Gln Leu Ser	Arg Gly Thr Pro
35	40	45
Val Asp Glu Arg Leu Phe	Leu Ile Val Arg Val Thr	Val Gln Leu Ser
50	55	60
His Pro Ala Asp Met Gln	Leu Val Leu Arg Lys Arg	Ile Cys Val Asn
65	70	75
Val His Gly Arg Gln Gly	Phe Ala Gln Ser Leu Leu	Lys Lys Met Ser
85	90	95
His Arg Ser Ser Ile Pro	Gly Cys Gly Val Thr Phe	Glu Ile Val Ser

100	105	110
Asn Ile Pro Glu Asp Ala Gln Gly Val Glu Glu Arg Glu Ala Leu Ala		
115	120	125
Arg Met Ala Ala Asn Val Glu Asn Pro Ala Ser Ala Asp Ser Glu Ala		
130	135	140
Tyr Ile Glu Lys Tyr Leu Arg Ser Val Leu Ala Val Glu Asn Leu Leu		
145	150	155
Thr Leu Asp Arg Leu Arg Gln Glu Val Ala Val Lys Glu Gln Leu Thr		
165	170	175
Gly Lys Gly Lys Leu Ser Arg Arg Ser Ile Ser Ser Pro Asn Val Asn		
180	185	190
Arg Leu Ser Gly Ser Arg Gln Asp Leu Ile Pro Ser Tyr Ser Leu Gly		
195	200	205
Ser Asn Lys Gly Arg Trp Glu Ser Gln Gln Asp Val Ser Gln Thr Thr		
210	215	220
Val Ser Arg Gly Ile Ala Pro Ala Pro Ala Leu Ser Val Ser Pro Gln		
225	230	235
Asn Asn His Ser Pro Asp Pro Gly Leu Ser Asn Leu Ala Ala Ser Tyr		
245	250	255
Leu Asn Pro Val Lys Ser Phe Val Pro Gln Met Pro Lys Leu Leu Lys		
260	265	270
Ser Leu Phe Pro Val Arg Asp Glu Lys Arg Gly Lys Arg Pro Ser Pro		
275	280	285
Leu Ala His Gln Pro Val Pro Arg Ile Met Val Gln Ser Ala Ser Pro		
290	295	300
Asp Ile Arg Val Thr Arg Met Glu Glu Ala Gln Pro Glu Met Gly Pro		
305	310	315
Asp Val Leu Val Gln Thr Met Gly Ala Pro Ala Leu Lys Ile Cys Asp		
325	330	335
Lys Pro Ala Lys Val Pro Ser Pro Pro Val Ile Ala Val Thr Ala		
340	345	350
Val Thr Pro Ala Pro Glu Ala Gln Asp Gly Pro Pro Ser Pro Leu Ser		
355	360	365
Glu Ala Ser Ser Gly Tyr Phe Ser His Ser Val Ser Thr Ala Thr Leu		
370	375	380
Ser Asp Ala Leu Gly Pro Gly Leu Asp Ala Ala Pro Pro Gly Ser		
385	390	395
Met Pro Thr Ala Pro Glu Ala Glu Pro Glu Ala Pro Ile Ser His Pro		
405	410	415
Pro Pro Pro Thr Ala Val Pro Ala Glu Glu Pro Pro Gly Pro Gln Gln		
420	425	430
Leu Val Ser Pro Gly Arg Glu Arg Pro Asp Leu Glu Ala Pro Ala Pro		
435	440	445
Gly Ser Pro Phe Arg Val Arg Arg Val Arg Ala Ser Glu Leu Arg Ser		
450	455	460
Phe Ser Arg Met Leu Ala Gly Asp Pro Gly Cys Ser Pro Gly Ala Glu		
465	470	475
Gly Asn Ala Pro Ala Pro Gly Ala Gly Gly Gln Ala Leu Ala Ser Asp		
485	490	495
Ser Glu Glu Ala Asp Glu Val Pro Glu Trp Leu Arg Glu Gly Glu Phe		
500	505	510
Val Thr Val Gly Ala His Lys Thr Gly Val Val Arg Tyr Val Gly Pro		
515	520	525
Ala Asp Phe Gln Glu Gly Thr Trp Val Gly Val Glu Leu Asp Leu Pro		
530	535	540
Ser Gly Lys Asn Asp Gly Ser Ile Gly Gly Lys Gln Tyr Phe Arg Cys		
545	550	555
Asn Pro Gly Tyr Gly Leu Leu Val Arg Pro Ser Arg Val Arg Arg Ala		
565	570	575
Thr Gly Pro Val Arg Arg Arg Ser Thr Gly Leu Arg Leu Gly Ala Pro		
580	585	590
Glu Ala Arg Arg Ser Ala Thr Leu Ser Gly Ser Ala Thr Asn Leu Ala		
595	600	605
Ser Leu Thr Ala Ala Leu Ala Lys Ala Asp Arg Ser His Lys Asn Pro		

610 615 620
 Glu Asn Arg Lys Ser Trp Ala Ser
 625 630 632

<210> 3210
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 3210
 Ser Pro Phe Trp Thr Glu Lys Arg Arg Met Glu Lys Pro Leu Phe Pro
 1 5 10 15
 Leu Val Pro Leu His Trp Phe Gly Phe Gly Tyr Thr Ala Leu Val Val
 20 25 30
 Ser Gly Gly Ile Val Gly Tyr Val Lys Thr Gly Ser Val Pro Ser Leu
 35 40 45
 Ala Ala Gly Leu Leu Phe Gly Ser Leu Ala Gly Leu Gly Ala Tyr Gln
 50 55 60
 Leu Tyr Gln Asp Pro Arg Asn Val Trp Gly Phe Leu Ala Ala Thr Ser
 65 70 75 80
 Val Thr Phe Val Gly Val Met Gly Met Arg Ser Tyr Tyr Tyr Gly Lys
 85 90 95
 Phe Met Pro Val Gly Leu Ile Ala Gly Ala Ser Leu Leu Met Ala Ala
 100 105 110
 Lys Val Gly Val Arg Met Leu Met Thr Ser Asp
 115 120 123

<210> 3211
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 3211
 Val Gly Met Glu Leu Pro Ala Val Asn Leu Lys Val Ile Leu Leu Gly
 1 5 10 15
 His Trp Leu Leu Thr Thr Trp Gly Cys Ile Val Phe Ser Gly Ser Tyr
 20 25 30
 Ala Trp Ala Asn Phe Thr Ile Leu Ala Leu Gly Val Trp Ala Val Ala
 35 40 45
 Gln Arg Asp Ser Ile Asp Ala Ile Ser Met Phe Leu Gly Gly Leu Leu
 50 55 60
 Ala Thr Ile Phe Leu Asp Ile Val His Ile Ser Ile Phe Tyr Pro Arg
 65 70 75 80
 Val Ser Leu Thr Asp Thr Gly Arg Phe Gly Val Gly Met Ala Ile Leu
 85 90 95
 Ser Leu Leu Leu Lys Pro Leu Ser Cys Cys Phe Val Tyr His Met Tyr
 100 105 110
 Arg Glu Arg Gly Gly Glu Leu Leu Val His Thr Gly Phe Leu Gly Ser
 115 120 125
 Ser Gln Asp Arg Ser Ala Tyr Gln Thr Ile Asp Ser Ala Glu Ala Pro
 130 135 140
 Ala Asp Pro Phe Ala Val Pro Glu Gly Arg Ser Gln Asp Ala Arg Gly
 145 150 155 160
 Tyr
 161

<210> 3212
 <211> 654
 <212> PRT
 <213> Homo sapiens

<400> 3212
 Phe Arg Cys Gly Leu Ala Pro Lys Gly Arg Pro Arg Arg Arg Ala Asp
 1 5 10 15
 Pro Val Ala Ser Ala Ile Met Asp Pro Ala Glu Ala Val Leu Gln Glu
 20 25 30
 Lys Ala Leu Lys Phe Met Met Glu Phe Arg Ser Trp Cys Pro Gly Trp
 35 40 45
 Asn Thr Met Ala Arg Ser Arg Leu Thr Ala Thr Ser Thr Ser Arg Val
 50 55 60
 Gln Cys Ser Met Pro Arg Ser Leu Trp Leu Gly Cys Ser Ser Leu Ala
 65 70 75 80
 Asp Ser Met Pro Ser Leu Arg Cys Leu Tyr Asn Pro Gly Thr Gly Ala
 85 90 95
 Leu Thr Ala Phe Gln Asn Ser Ser Glu Arg Glu Asp Cys Asn Asn Gly
 100 105 110
 Glu Pro Pro Arg Lys Ile Ile Pro Glu Lys Asn Ser Leu Arg Gln Thr
 115 120 125
 Tyr Asn Ser Cys Ala Arg Leu Cys Leu Asn Gln Glu Thr Val Cys Leu
 130 135 140
 Ala Ser Thr Ala Met Lys Thr Glu Asn Cys Val Ala Lys Thr Lys Leu
 145 150 155 160
 Ala Asn Gly Thr Ser Ser Met Ile Val Pro Lys Gln Arg Lys Leu Ser
 165 170 175
 Ala Ser Tyr Glu Lys Glu Lys Glu Leu Cys Val Lys Tyr Phe Glu Gln
 180 185 190
 Trp Ser Glu Ser Asp Gln Val Glu Phe Val Glu His Leu Ile Ser Gln
 195 200 205
 Met Cys His Tyr Gln His Gly His Ile Asn Ser Tyr Leu Lys Pro Met
 210 215 220
 Leu Gln Arg Asp Phe Ile Thr Ala Leu Pro Ala Arg Gly Leu Asp His
 225 230 235 240
 Ile Ala Glu Asn Ile Leu Ser Tyr Leu Asp Ala Lys Ser Leu Cys Ala
 245 250 255
 Ala Glu Leu Val Cys Lys Glu Trp Tyr Arg Val Thr Ser Asp Gly Met
 260 265 270
 Leu Trp Lys Lys Leu Ile Glu Arg Met Val Arg Thr Asp Ser Leu Trp
 275 280 285
 Arg Gly Leu Ala Glu Arg Arg Gly Trp Gly Gln Tyr Leu Phe Lys Asn
 290 295 300
 Lys Pro Pro Asp Gly Asn Ala Pro Pro Asn Ser Phe Tyr Arg Ala Leu
 305 310 315 320
 Tyr Pro Lys Ile Ile Gln Asp Ile Glu Thr Ile Glu Ser Asn Trp Arg
 325 330 335
 Cys Gly Arg His Ser Leu Gln Arg Ile His Cys Arg Ser Glu Thr Ser
 340 345 350
 Lys Gly Val Tyr Cys Leu Gln Tyr Asp Asp Gln Lys Ile Val Ser Gly
 355 360 365
 Leu Arg Asp Asn Thr Ile Lys Ile Trp Asp Lys Asn Thr Leu Glu Cys
 370 375 380
 Lys Arg Ile Leu Thr Gly His Thr Gly Ser Val Leu Cys Leu Gln Tyr
 385 390 395 400
 Asp Glu Arg Val Ile Ile Thr Gly Ser Ser Asp Ser Thr Val Arg Val
 405 410 415
 Trp Asp Val Asn Thr Gly Glu Met Leu Asn Thr Leu Ile His His Cys
 420 425 430
 Glu Ala Val Leu His Leu Arg Phe Asn Asn Gly Met Met Val Thr Cys
 435 440 445
 Ser Lys Asp Arg Ser Ile Ala Val Trp Asp Met Ala Ser Pro Thr Asp

450	455	460
Ile Thr Leu Arg Arg Val Leu Val Gly His Arg Ala Ala Val Asn Val		
465	470	475
Val Asp Phe Asp Asp Lys Tyr Ile Val Ser Ala Ser Gly Asp Arg Thr		480
	485	490
Ile Lys Val Trp Asn Thr Ser Thr Cys Glu Phe Val Arg Thr Leu Asn		495
	500	505
Gly His Lys Arg Gly Ile Ala Cys Leu Gln Tyr Arg Asp Arg Leu Val		510
	515	520
Val Ser Gly Ser Ser Asp Asn Thr Ile Arg Leu Trp Asp Ile Glu Cys		525
	530	535
Gly Ala Cys Leu Arg Val Leu Glu Gly His Glu Glu Leu Val Arg Cys		540
545	550	555
Ile Arg Phe Asp Asn Lys Arg Ile Val Ser Gly Ala Tyr Asp Gly Lys		560
	565	570
Ile Lys Val Trp Asp Leu Val Ala Ala Leu Asp Pro Arg Ala Pro Ala		575
	580	585
Gly Thr Leu Cys Leu Arg Thr Leu Val Glu His Ser Gly Arg Val Phe		590
	595	600
Arg Leu Gln Phe Asp Glu Phe Gln Ile Val Ser Ser Ser His Asp Asp		605
	610	615
Thr Ile Leu Ile Trp Asp Phe Leu Asn Asp Pro Ala Ala Gln Ser Glu		620
625	630	635
Pro Pro Arg Ser Pro Ser Arg Thr Tyr Thr Tyr Ile Ser Arg		640
	645	650
		654

<210> 3213

<211> 654

<212> PRT

<213> Homo sapiens

<400> 3213

Phe Arg Cys Gly Leu Ala Pro Lys Gly Arg Pro Arg Arg Arg Ala Asp	
1	5
Pro Val Ala Ser Ala Ile Met Asp Pro Ala Glu Ala Val Leu Gln Glu	10
	20
Lys Ala Leu Lys Phe Met Met Glu Phe Arg Ser Trp Cys Pro Gly Trp	25
	30
Asn Thr Met Ala Arg Ser Arg Leu Thr Ala Thr Ser Thr Ser Arg Val	35
	40
Gln Cys Ser Met Pro Arg Ser Leu Trp Leu Gly Cys Ser Ser Leu Ala	45
	50
Asp Ser Met Pro Ser Leu Arg Cys Leu Tyr Asn Pro Gly Thr Gly Ala	55
	60
Leu Thr Ala Phe Gln Asn Ser Ser Glu Arg Glu Asp Cys Asn Asn Gly	65
	70
Glu Pro Pro Arg Lys Ile Ile Pro Glu Lys Asn Ser Leu Arg Gln Thr	75
	80
Tyr Asn Ser Cys Ala Arg Leu Cys Leu Asn Gln Glu Thr Val Cys Leu	85
	90
Ala Ser Thr Ala Met Lys Thr Glu Asn Cys Val Ala Lys Thr Lys Leu	95
	100
Ala Asn Gly Thr Ser Ser Met Ile Val Pro Lys Gln Arg Lys Leu Ser	105
	110
Ala Ser Tyr Glu Lys Glu Lys Glu Leu Cys Val Lys Tyr Phe Glu Gln	115
	120
Trp Ser Glu Ser Asp Gln Val Glu Phe Val Glu His Leu Ile Ser Gln	125
	130
Met Cys His Tyr Gln His Gly His Ile Asn Ser Tyr Leu Lys Pro Met	135
	140
Leu Gln Arg Asp Phe Ile Thr Ala Leu Pro Ala Arg Gly Leu Asp His	145
	150
	155
	160
	165
	170
	175
	180
	185
	190
	195
	200
	205
	210
	215
	220

225		230		235		240
Ile Ala Glu Asn	Ile Leu Ser Tyr Leu	Asp Ala Lys Ser Leu	Cys Ala			
	245	250	255			
Ala Glu Leu Val	Cys Lys Glu Trp Tyr Arg Val Thr	Ser Asp Gly Met				
	260	265	270			
Leu Trp Lys Lys	Leu Ile Glu Arg Met Val Arg Thr	Asp Ser Leu Trp				
	275	280	285			
Arg Gly Leu Ala	Glu Arg Arg Gly Trp Gly Gln Tyr Leu Phe	Lys Asn				
	290	295	300			
Lys Pro Pro Asp	Gly Asn Ala Pro Pro Asn Ser Phe Tyr Arg Ala	Leu				
305	310	315	320			
Tyr Pro Lys Ile	Ile Gln Asp Ile Glu Thr Ile Glu Ser Asn Trp	Arg				
	325	330	335			
Cys Gly Arg His	Ser Leu Gln Arg Ile His Cys Arg Ser	Glu Thr Ser				
	340	345	350			
Lys Gly Val Tyr	Cys Leu Gln Tyr Asp Asp Gln Lys Ile Val Ser	Gly				
	355	360	365			
Leu Arg Asp Asn	Thr Ile Lys Ile Trp Asp Lys Asn Thr Leu Glu	Cys				
	370	375	380			
Lys Arg Ile Leu	Thr Gly His Thr Gly Ser Val Leu Cys Leu Gln	Tyr				
385	390	395	400			
Asp Glu Arg Val	Ile Ile Thr Gly Ser Ser Asp Ser Thr Val Arg	Val				
	405	410	415			
Trp Asp Val Asn	Thr Gly Glu Met Leu Asn Thr Leu Ile His His	Cys				
	420	425	430			
Glu Ala Val Leu	His Leu Arg Phe Asn Asn Gly Met Met Val Thr	Cys				
	435	440	445			
Ser Lys Asp Arg	Ser Ile Ala Val Trp Asp Met Ala Ser Pro Thr	Asp				
	450	455	460			
Ile Thr Leu Arg	Arg Val Leu Val Gly His Arg Ala Ala Val Asn	Val				
465	470	475	480			
Val Asp Phe Asp	Asp Lys Tyr Ile Val Ser Ala Ser Gly Asp Arg	Thr				
	485	490	495			
Ile Lys Val Trp	Asn Thr Ser Thr Cys Glu Phe Val Arg Thr Leu	Asn				
	500	505	510			
Gly His Lys Arg	Gly Ile Ala Cys Leu Gln Tyr Arg Asp Arg Leu	Val				
	515	520	525			
Val Ser Gly Ser	Ser Asp Asn Thr Ile Arg Leu Trp Asp Ile Glu	Cys				
	530	535	540			
Gly Ala Cys Leu	Arg Val Leu Glu Gly His Glu Glu Leu Val Arg	Cys				
545	550	555	560			
Ile Arg Phe Asp	Asn Lys Arg Ile Val Ser Gly Ala Tyr Asp Gly	Lys				
	565	570	575			
Ile Lys Val Trp	Asp Leu Val Ala Ala Leu Asp Pro Arg Ala Pro	Ala				
	580	585	590			
Gly Thr Leu Cys	Leu Arg Thr Leu Val Glu His Ser Gly Arg Val	Phe				
	595	600	605			
Arg Leu Gln Phe	Asp Glu Phe Gln Ile Val Ser Ser Ser His Asp	Asp				
	610	615	620			
Thr Ile Leu Ile	Trp Asp Phe Leu Asn Asp Pro Ala Ala Gln Ser	Glu				
625	630	635	640			
Pro Pro Arg Ser	Pro Ser Arg Thr Tyr Thr Tyr Ile Ser Arg					
	645	650	654			

<210> 3214

<211> 654

<212> PRT

<213> Homo sapiens

<400> 3214

Phe Arg Cys Gly Leu Ala Pro Lys Gly Arg Pro Arg Arg Arg Ala Asp

1	5	10	15
Pro Val Ala Ser Ala Ile Met Asp Pro Ala Glu Ala Val Leu Gln Glu			
	20	25	30
Lys Ala Leu Lys Phe Met Met Glu Phe Arg Ser Trp Cys Pro Gly Trp			
	35	40	45
Asn Thr Met Ala Arg Ser Arg Leu Thr Ala Thr Ser Thr Ser Arg Val			
	50	55	60
Gln Cys Ser Met Pro Arg Ser Leu Trp Leu Gly Cys Ser Ser Leu Ala			
	65	70	75
Asp Ser Met Pro Ser Leu Arg Cys Leu Tyr Asn Pro Gly Thr Gly Ala			
	85	90	95
Leu Thr Ala Phe Gln Asn Ser Ser Glu Arg Glu Asp Cys Asn Asn Gly			
	100	105	110
Glu Pro Pro Arg Lys Ile Ile Pro Glu Lys Asn Ser Leu Arg Gln Thr			
	115	120	125
Tyr Asn Ser Cys Ala Arg Leu Cys Leu Asn Gln Glu Thr Val Cys Leu			
	130	135	140
Ala Ser Thr Ala Met Lys Thr Glu Asn Cys Val Ala Lys Thr Lys Leu			
	145	150	155
Ala Asn Gly Thr Ser Ser Met Ile Val Pro Lys Gln Arg Lys Leu Ser			
	165	170	175
Ala Ser Tyr Glu Lys Glu Lys Glu Leu Cys Val Lys Tyr Phe Glu Gln			
	180	185	190
Trp Ser Glu Ser Asp Gln Val Glu Phe Val Glu His Leu Ile Ser Gln			
	195	200	205
Met Cys His Tyr Gln His Gly His Ile Asn Ser Tyr Leu Lys Pro Met			
	210	215	220
Leu Gln Arg Asp Phe Ile Thr Ala Leu Pro Ala Arg Gly Leu Asp His			
	225	230	235
Ile Ala Glu Asn Ile Leu Ser Tyr Leu Asp Ala Lys Ser Leu Cys Ala			
	245	250	255
Ala Glu Leu Val Cys Lys Glu Trp Tyr Arg Val Thr Ser Asp Gly Met			
	260	265	270
Leu Trp Lys Lys Leu Ile Glu Arg Met Val Arg Thr Asp Ser Leu Trp			
	275	280	285
Arg Gly Leu Ala Glu Arg Arg Gly Trp Gly Gln Tyr Leu Phe Lys Asn			
	290	295	300
Lys Pro Pro Asp Gly Asn Ala Pro Pro Asn Ser Phe Tyr Arg Ala Leu			
	305	310	315
Tyr Pro Lys Ile Ile Gln Asp Ile Glu Thr Ile Glu Ser Asn Trp Arg			
	325	330	335
Cys Gly Arg His Ser Leu Gln Arg Ile His Cys Arg Ser Glu Thr Ser			
	340	345	350
Lys Gly Val Tyr Cys Leu Gln Tyr Asp Asp Gln Lys Ile Val Ser Gly			
	355	360	365
Leu Arg Asp Asn Thr Ile Lys Ile Trp Asp Lys Asn Thr Leu Glu Cys			
	370	375	380
Lys Arg Ile Leu Thr Gly His Thr Gly Ser Val Leu Cys Leu Gln Tyr			
	385	390	395
Asp Glu Arg Val Ile Ile Thr Gly Ser Ser Asp Ser Thr Val Arg Val			
	405	410	415
Trp Asp Val Asn Thr Gly Glu Met Leu Asn Thr Leu Ile His His Cys			
	420	425	430
Glu Ala Val Leu His Leu Arg Phe Asn Asn Gly Met Met Val Thr Cys			
	435	440	445
Ser Lys Asp Arg Ser Ile Ala Val Trp Asp Met Ala Ser Pro Thr Asp			
	450	455	460
Ile Thr Leu Arg Arg Val Leu Val Gly His Arg Ala Ala Val Asn Val			
	465	470	475
Val Asp Phe Asp Asp Lys Tyr Ile Val Ser Ala Ser Gly Asp Arg Thr			
	485	490	495
Ile Lys Val Trp Asn Thr Ser Thr Cys Glu Phe Val Arg Thr Leu Asn			
	500	505	510
Gly His Lys Arg Gly Ile Ala Cys Leu Gln Tyr Arg Asp Arg Leu Val			

515	520	525
Val Ser Gly Ser Ser Asp Asn Thr Ile Arg Leu Trp Asp Ile Glu Cys		
530	535	540
Gly Ala Cys Leu Arg Val Leu Glu Gly His Glu Glu Leu Val Arg Cys		
545	550	555
Ile Arg Phe Asp Asn Lys Arg Ile Val Ser Gly Ala Tyr Asp Gly Lys		560
565	570	575
Ile Lys Val Trp Asp Leu Val Ala Ala Leu Asp Pro Arg Ala Pro Ala		
580	585	590
Gly Thr Leu Cys Leu Arg Thr Leu Val Glu His Ser Gly Arg Val Phe		
595	600	605
Arg Leu Gln Phe Asp Glu Phe Gln Ile Val Ser Ser Ser His Asp Asp		
610	615	620
Thr Ile Leu Ile Trp Asp Phe Leu Asn Asp Pro Ala Ala Gln Ser Glu		640
625	630	635
Pro Pro Arg Ser Pro Ser Arg Thr Tyr Thr Tyr Ile Ser Arg		
645	650	654

<210> 3215
 <211> 458
 <212> PRT
 <213> Homo sapiens

<400> 3215

Glu Ala Arg Leu Val Gly Cys Gln Arg Gly Gly Pro Ala Arg Pro Gly		
1	5	10
Ser Tyr Ser Ser Gly Ala Glu Thr Ala Gly Arg Ala Met Ala Ala Asn		15
20	25	30
Leu Ser Arg Asn Gly Pro Ala Leu Gln Glu Ala Tyr Val Arg Val Val		
35	40	45
Thr Glu Lys Ser Pro Thr Asp Trp Ala Leu Phe Thr Tyr Glu Gly Asn		
50	55	60
Ser Asn Asp Ile Arg Val Ala Gly Thr Gly Glu Gly Gly Leu Glu Glu		80
65	70	75
Met Val Glu Glu Leu Asn Ser Gly Lys Val Met Tyr Ala Phe Cys Arg		95
85	90	
Val Lys Asp Pro Asn Ser Gly Leu Pro Lys Phe Val Leu Ile Asn Trp		
100	105	110
Thr Gly Glu Gly Val Asn Asp Val Arg Lys Gly Ala Cys Ala Ser His		
115	120	125
Val Ser Thr Met Ala Ser Phe Leu Lys Gly Ala His Val Thr Ile Asn		
130	135	140
Ala Arg Ala Glu Glu Asp Val Glu Pro Glu Cys Ile Met Glu Lys Val		160
145	150	155
Ala Lys Ala Ser Gly Ala Asn Tyr Ser Phe His Lys Glu Ser Gly Arg		175
165	170	
Phe Gln Asp Val Gly Pro Gln Ala Pro Val Gly Ser Val Tyr Gln Lys		190
180	185	
Thr Asn Ala Val Ser Glu Ile Lys Arg Val Gly Lys Asp Ser Phe Trp		
195	200	205
Ala Lys Ala Glu Lys Glu Glu Glu Asn Arg Arg Leu Glu Glu Lys Arg		
210	215	220
Arg Ala Glu Glu Ala Gln Arg Gln Leu Glu Gln Glu Arg Arg Glu Arg		240
225	230	235
Glu Leu Arg Glu Ala Ala Arg Arg Glu Gln Arg Tyr Gln Glu Gln Gly		255
245	250	
Gly Glu Ala Ser Pro Gln Arg Thr Trp Glu Gln Gln Gln Glu Val Val		270
260	265	
Ser Arg Asn Arg Asn Glu Gln Glu Ser Ala Val His Pro Arg Glu Ile		
275	280	285
Phe Lys Gln Lys Glu Arg Ala Met Ser Thr Thr Ser Ile Ser Ser Pro		

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      290              295              300
Gln Pro Gly Lys Leu Arg Ser Pro Phe Leu Gln Lys Gln Leu Thr Gln
305              310              315              320
Pro Glu Thr His Phe Gly Arg Glu Pro Ala Ala Ala Ile Ser Arg Pro
      325              330              335
Arg Ala Asp Leu Pro Ala Glu Glu Pro Ala Pro Ser Thr Pro Pro Cys
      340              345              350
Leu Val Gln Ala Glu Glu Glu Ala Val Tyr Glu Glu Pro Pro Glu Gln
      355              360              365
Glu Thr Phe Tyr Glu Gln Pro Pro Leu Val Gln Gln Gln Gly Ala Gly
      370              375              380
Ser Glu His Ile Asp His His Ile Gln Gly Gln Gly Leu Ser Gly Gln
385              390              395              400
Gly Leu Cys Ala Arg Ala Leu Tyr Asp Tyr Gln Ala Ala Asp Asp Thr
      405              410              415
Glu Ile Ser Phe Asp Pro Glu Asn Leu Ile Thr Gly Ile Glu Val Ile
      420              425              430
Asp Glu Gly Trp Trp Arg Gly Tyr Gly Pro Asp Gly His Phe Gly Met
      435              440              445
Phe Pro Ala Asn Tyr Val Glu Leu Ile Glu
450              455              458

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<210> 3216
<211> 180
<212> PRT
<213> Homo sapiens

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      <400> 3216
Ala Met Ala Ser Thr Leu Glu Tyr Ser Pro Ser Pro Leu Arg Arg Leu
  1              5              10              15
Val Gly Pro Ala Ala Gly Phe Ser Arg Ala Ala Arg Ala Asp Leu Ser
      20              25              30
Trp Asp Pro Met Ala Phe Phe Thr Gly Leu Trp Gly Pro Phe Thr Cys
      35              40              45
Val Ser Arg Val Leu Ser His His Cys Phe Ser Thr Thr Gly Ser Leu
  50              55              60
Ser Ala Ile Gln Lys Met Thr Arg Val Arg Val Val Asp Asn Ser Ala
  65              70              75              80
Leu Gly Asn Ser Pro Tyr His Arg Ala Pro Arg Cys Ile His Val Tyr
      85              90              95
Lys Lys Asn Gly Val Gly Lys Val Gly Asp Gln Ile Leu Leu Ala Ile
      100              105              110
Lys Gly Gln Lys Lys Lys Ala Leu Ile Val Gly His Cys Met Pro Gly
      115              120              125
Pro Arg Met Thr Pro Arg Phe Asp Ser Asn Asn Val Val Leu Ile Glu
      130              135              140
Asp Asn Gly Asn Pro Val Gly Thr Arg Ile Lys Thr Pro Ile Pro Thr
145              150              155              160
Ser Leu Arg Lys Arg Glu Gly Glu Tyr Ser Lys Val Leu Ala Ile Ala
      165              170              175
Gln Asn Phe Val
      180

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<210> 3217
<211> 521
<212> PRT
<213> Homo sapiens

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<400> 3217

Met	Leu	Cys	Ala	Leu	Leu	Leu	Leu	Pro	Ser	Leu	Leu	Gly	Ala	Thr	Arg
1				5					10					15	
Ala	Ser	Pro	Thr	Ser	Gly	Pro	Gln	Glu	Cys	Ala	Lys	Gly	Ser	Thr	Val
			20					25					30		
Trp	Cys	Gln	Asp	Leu	Gln	Thr	Ala	Ala	Arg	Cys	Gly	Ala	Val	Gly	Tyr
		35					40					45			
Cys	Gln	Gly	Ala	Val	Trp	Asn	Lys	Pro	Thr	Ala	Lys	Ser	Leu	Pro	Cys
	50					55					60				
Asp	Val	Cys	Gln	Asp	Ile	Ala	Ala	Ala	Ala	Gly	Asn	Gly	Leu	Asn	Pro
65					70					75				80	
Asp	Ala	Thr	Glu	Ser	Asp	Ile	Leu	Ala	Leu	Val	Met	Lys	Thr	Cys	Glu
				85					90					95	
Trp	Leu	Pro	Ser	Gln	Glu	Ser	Ser	Ala	Gly	Cys	Lys	Trp	Met	Val	Asp
			100					105					110		
Ala	His	Ser	Ser	Ala	Ile	Leu	Ser	Met	Leu	Arg	Gly	Ala	Pro	Asp	Ser
		115					120					125			
Ala	Pro	Ala	Gln	Val	Cys	Thr	Ala	Leu	Ser	Leu	Cys	Glu	Pro	Leu	Gln
	130					135					140				
Arg	His	Leu	Ala	Thr	Leu	Arg	Pro	Leu	Ser	Lys	Glu	Asp	Thr	Phe	Glu
145					150					155				160	
Ala	Val	Ala	Pro	Phe	Met	Ala	Asn	Gly	Pro	Leu	Thr	Phe	His	Pro	Arg
				165					170					175	
Gln	Ala	Pro	Glu	Gly	Ala	Leu	Cys	Gln	Asp	Cys	Val	Arg	Gln	Val	Ser
			180					185					190		
Arg	Leu	Gln	Glu	Ala	Val	Arg	Ser	Asn	Leu	Thr	Leu	Ala	Asp	Leu	Asn
	195						200					205			
Ile	Gln	Glu	Gln	Cys	Glu	Ser	Leu	Gly	Pro	Gly	Leu	Ala	Val	Leu	Cys
	210					215					220				
Lys	Asn	Tyr	Leu	Phe	Gln	Phe	Phe	Val	Pro	Ala	Asp	Gln	Ala	Leu	Arg
225					230					235				240	
Leu	Leu	Pro	Pro	Gln	Glu	Leu	Cys	Arg	Lys	Gly	Gly	Phe	Cys	Glu	Glu
				245					250					255	
Leu	Gly	Ala	Pro	Ala	Arg	Leu	Thr	Gln	Val	Val	Ala	Met	Asp	Gly	Val
			260					265					270		
Pro	Ser	Leu	Glu	Leu	Gly	Leu	Pro	Arg	Lys	Gln	Ser	Glu	Met	Gln	Met
	275					280						285			
Lys	Ala	Gly	Val	Thr	Cys	Glu	Val	Cys	Met	Asn	Val	Val	Gln	Lys	Leu
	290					295					300				
Asp	His	Trp	Leu	Met	Ser	Asn	Ser	Ser	Glu	Leu	Met	Ile	Thr	His	Ala
305					310					315				320	
Leu	Glu	Arg	Val	Cys	Ser	Val	Met	Pro	Ala	Ser	Ile	Thr	Lys	Glu	Cys
				325					330					335	
Ile	Ile	Leu	Val	Asp	Thr	Tyr	Ser	Pro	Ser	Leu	Val	Gln	Leu	Val	Ala
			340					345					350		
Lys	Ile	Thr	Pro	Glu	Lys	Val	Cys	Lys	Phe	Ile	Arg	Leu	Cys	Gly	Asn
	355						360					365			
Arg	Arg	Arg	Ala	Arg	Ala	Val	His	Asp	Ala	Tyr	Ala	Ile	Val	Pro	Ser
	370					375					380				
Pro	Glu	Trp	Asp	Ala	Glu	Asn	Gln	Gly	Ser	Phe	Cys	Asn	Gly	Cys	Lys
385					390					395				400	
Arg	Leu	Leu	Thr	Val	Ser	Ser	His	Asn	Leu	Glu	Ser	Lys	Ser	Thr	Lys
				405				410						415	
Arg	Asp	Ile	Leu	Val	Ala	Phe	Lys	Gly	Gly	Cys	Ser	Ile	Leu	Pro	Leu
			420					425					430		
Pro	Tyr	Met	Ile	Gln	Cys	Lys	His	Phe	Val	Thr	Gln	Tyr	Glu	Pro	Val
	435						440					445			
Leu	Ile	Glu	Ser	Leu	Lys	Asp	Met	Met	Asp	Pro	Val	Ala	Val	Cys	Lys
	450					455					460				
Lys	Val	Gly	Ala	Cys	His	Gly	Pro	Arg	Thr	Pro	Leu	Leu	Gly	Thr	Asp
465					470					475				480	
Gln	Cys	Ala	Leu	Gly	Pro	Ser	Phe	Trp	Cys	Arg	Ser	Gln	Glu	Ala	Ala
				485					490					495	
Lys	Leu	Cys	Asn	Ala	Val	Gln	His	Cys	Gln	Lys	His	Val	Trp	Lys	Glu

500 505 510
 Met His Leu His Ala Gly Glu His Ala
 515 520 521

<210> 3218
 <211> 521
 <212> PRT
 <213> Homo sapiens

<400> 3218
 Met Leu Cys Ala Leu Leu Leu Leu Pro Ser Leu Leu Gly Ala Thr Arg
 1 5 10 15
 Ala Ser Pro Thr Ser Gly Pro Gln Glu Cys Ala Lys Gly Ser Thr Val
 20 25 30
 Trp Cys Gln Asp Leu Gln Thr Ala Ala Arg Cys Gly Ala Val Gly Tyr
 35 40 45
 Cys Gln Gly Ala Val Trp Asn Lys Pro Thr Ala Lys Ser Leu Pro Cys
 50 55 60
 Asp Val Cys Gln Asp Ile Ala Ala Ala Gly Asn Gly Leu Asn Pro
 65 70 75 80
 Asp Ala Thr Glu Ser Asp Ile Leu Ala Leu Val Met Lys Thr Cys Glu
 85 90 95
 Trp Leu Pro Ser Gln Glu Ser Ser Ala Gly Cys Lys Trp Met Val Asp
 100 105 110
 Ala His Ser Ser Ala Ile Leu Ser Met Leu Arg Gly Ala Pro Asp Ser
 115 120 125
 Ala Pro Ala Gln Val Cys Thr Ala Leu Ser Leu Cys Glu Pro Leu Gln
 130 135 140
 Arg His Leu Ala Thr Leu Arg Pro Leu Ser Lys Glu Asp Thr Phe Glu
 145 150 155 160
 Ala Val Ala Pro Phe Met Ala Asn Gly Pro Leu Thr Phe His Pro Arg
 165 170 175
 Gln Ala Pro Glu Gly Ala Leu Cys Gln Asp Cys Val Arg Gln Val Ser
 180 185 190
 Arg Leu Gln Glu Ala Val Arg Ser Asn Leu Thr Leu Ala Asp Leu Asn
 195 200 205
 Ile Gln Glu Gln Cys Glu Ser Leu Gly Pro Gly Leu Ala Val Leu Cys
 210 215 220
 Lys Asn Tyr Leu Phe Gln Phe Phe Val Pro Ala Asp Gln Ala Leu Arg
 225 230 235 240
 Leu Leu Pro Pro Gln Glu Leu Cys Arg Lys Gly Gly Phe Cys Glu Glu
 245 250 255
 Leu Gly Ala Pro Ala Arg Leu Thr Gln Val Val Ala Met Asp Gly Val
 260 265 270
 Pro Ser Leu Glu Leu Gly Leu Pro Arg Lys Gln Ser Glu Met Gln Met
 275 280 285
 Lys Ala Gly Val Thr Cys Glu Val Cys Met Asn Val Val Gln Lys Leu
 290 295 300
 Asp His Trp Leu Met Ser Asn Ser Ser Glu Leu Met Ile Thr His Ala
 305 310 315 320
 Leu Glu Arg Val Cys Ser Val Met Pro Ala Ser Ile Thr Lys Glu Cys
 325 330 335
 Ile Ile Leu Val Asp Thr Tyr Ser Pro Ser Leu Val Gln Leu Val Ala
 340 345 350
 Lys Ile Thr Pro Glu Lys Val Cys Lys Phe Ile Arg Leu Cys Gly Asn
 355 360 365
 Arg Arg Arg Ala Arg Ala Val His Asp Ala Tyr Ala Ile Val Pro Ser
 370 375 380
 Pro Glu Trp Asp Ala Glu Asn Gln Gly Ser Phe Cys Asn Gly Cys Lys
 385 390 395 400
 Arg Leu Leu Thr Val Ser Ser His Asn Leu Glu Ser Lys Ser Thr Lys

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      405      410      415
Arg Asp Ile Leu Val Ala Phe Lys Gly Gly Cys Ser Ile Leu Pro Leu
      420      425      430
Pro Tyr Met Ile Gln Cys Lys His Phe Val Thr Gln Tyr Glu Pro Val
      435      440      445
Leu Ile Glu Ser Leu Lys Asp Met Met Asp Pro Val Ala Val Cys Lys
      450      455      460
Lys Val Gly Ala Cys His Gly Pro Arg Thr Pro Leu Leu Gly Thr Asp
      465      470      475      480
Gln Cys Ala Leu Gly Pro Ser Phe Trp Cys Arg Ser Gln Glu Ala Ala
      485      490      495
Lys Leu Cys Asn Ala Val Gln His Cys Gln Lys His Val Trp Lys Glu
      500      505      510
Met His Leu His Ala Gly Glu His Ala
      515      520 521

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<210> 3219
 <211> 350
 <212> PRT
 <213> Homo sapiens

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      <400> 3219
Thr Ser Ala Glu Gly Trp Lys Gly Cys Thr Cys Thr Phe Lys Asp Arg
  1      5      10      15
Ser Lys Leu Arg Glu His Leu Arg Ser His Thr Gln Glu Lys Val Val
      20      25      30
Ala Cys Pro Thr Cys Gly Gly Met Phe Ala Asn Asn Thr Lys Phe Leu
      35      40      45
Asp His Ile Arg Arg Gln Thr Ser Leu Asp Gln Gln His Phe Gln Cys
      50      55      60
Ser His Cys Ser Lys Arg Phe Ala Thr Glu Arg Leu Leu Arg Asp His
      65      70      75      80
Met Arg Asn His Val Asn His Tyr Lys Cys Pro Leu Cys Asp Met Thr
      85      90      95
Cys Pro Leu Pro Ser Ser Leu Arg Asn His Met Arg Phe Arg His Ser
      100      105      110
Glu Asp Arg Pro Phe Lys Cys Asp Cys Cys Asp Tyr Ser Cys Lys Asn
      115      120      125
Leu Ile Asp Leu Gln Lys His Leu Asp Thr His Ser Glu Glu Pro Ala
      130      135      140
Tyr Arg Cys Asp Phe Glu Asn Cys Thr Phe Ser Ala Arg Ser Leu Cys
      145      150      155      160
Ser Ile Lys Ser His Tyr Arg Lys Val His Glu Gly Asp Ser Glu Pro
      165      170      175
Arg Tyr Lys Cys His Val Cys Asp Lys Cys Phe Thr Arg Gly Asn Asn
      180      185      190
Leu Thr Val His Leu Arg Lys Lys His Gln Phe Lys Trp Pro Ser Gly
      195      200      205
His Pro Arg Phe Arg Tyr Lys Glu His Glu Asp Gly Tyr Met Arg Leu
      210      215      220
Gln Leu Val Arg Tyr Glu Ser Val Glu Leu Thr Gln Gln Leu Leu Arg
      225      230      235      240
Gln Pro Gln Glu Gly Ser Gly Leu Gly Thr Ser Leu Asn Glu Ser Ser
      245      250      255
Leu Gln Gly Ile Ile Leu Glu Thr Val Pro Gly Glu Pro Gly Arg Lys
      260      265      270
Glu Glu Glu Glu Glu Gly Lys Gly Ser Glu Gly Thr Ala Leu Ser Ala
      275      280      285
Ser Gln Asp Asn Pro Ser Ser Val Ile His Val Val Asn Gln Thr Asn
      290      295      300
Ala Gln Gly Gln Gln Glu Ile Val Tyr Tyr Val Leu Ser Glu Ala Pro

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<400> 3220															
Ser 1	Leu	Gly	Ile	Pro 5	Ser	Gly	Asn	Thr	Arg 10	Gly	Thr	Gly	Leu	Val 15	Leu
Asp	Gly	Asp	Thr 20	Ser	Tyr	Thr	Tyr 25	His	Leu	Val	Cys	Met 30	Gly	Pro	Glu
Ala	Ser	Gly 35	Trp	Gly	Gln	Asp	Glu 40	Pro	Gln	Thr	Trp 45	Pro	Thr	Asp	His
Arg	Ala	Gln	Gln	Gly	Val	Gln	Arg 55	Gln	Gly	Val	Ser 60	Tyr	Ser	Val	His
Ala 65	Tyr	Thr	Gly	Gln	Pro 70	Ser	Pro	Arg	Gly	Leu 75	His	Ser	Glu	Asn	Arg 80
Glu	Asp	Glu	Gly	Trp 85	Gln	Val	Tyr	Arg	Leu 90	Gly	Ala	Arg	Asp	Ala	His 95
Gln	Gly	Arg	Pro 100	Thr	Trp	Ala	Leu 105	Arg	Pro	Glu	Asp	Gly	Glu	Asp	Lys 110
Glu	Met	Lys	Thr 115	Tyr	Arg	Leu	Asp 120	Ala	Gly	Asp	Ala	Asp	Pro	Arg	Arg 125
Leu	Cys	Asp	Leu	Glu	Arg	Glu	Arg 135	Trp	Ala	Val	Ile 140	Gln	Gly	Gln	Ala 145
Val 145	Arg	Lys	Ser	Ser	Thr 150	Val	Ala	Thr	Leu	Gln	Gly 155	Thr	Pro	Asp	His 160
Gly	Asp	Pro	Arg	Thr 165	Pro	Gly	Pro	Pro	Arg	Ser	Thr 170	Pro	Leu	Glu	Glu 175
Asn	Val	Val	Asp 180	Arg	Glu	Gln	Ile 185	Asp	Phe	Leu	Ala	Ala	Arg	Gln	Gln 190
Phe	Leu	Ser	Leu	Glu	Gln	Ala	Asn 200	Lys	Gly	Ala	Pro	His	Ser	Ser	Pro 205
Ala	Arg	Gly	Thr	Pro	Ala	Gly 215	Thr	Thr	Pro	Gly	Ala	Ser	Gln	Ala	Pro 220
Lys 225	Ala	Phe	Asn	Lys	Pro	His	Leu 230	Ala	Asn	Gly	His	Val	Val	Pro	Ile 240
Lys	Pro	Gln	Val	Lys 245	Gly	Val	Val	Arg	Glu	Glu	Asn	Lys	Val	Arg	Ala 255
Val	Pro	Thr	Trp 260	Ala	Ser	Val	Gln 265	Val	Val	Asp	Asp	Pro	Gly	Ser	Leu 270
Ala	Ser	Val	Glu	Ser	Pro	Gly	Thr 280	Pro	Lys	Glu	Thr	Pro	Ile	Glu	Arg 285
Glu	Ile	Arg	Leu	Ala	Gln	Glu	Arg 295	Glu	Ala	Asp	Leu	Arg	Glu	Gln	Arg 300
Gly 305	Leu	Arg	Gln	Ala	Thr	Asp	His 310	Gln	Glu	Leu	Val	Glu	Ile	Pro	Thr 320
Arg	Pro	Leu	Leu	Thr 325	Lys	Leu	Ser	Leu	Ile	Thr	Ala	Pro	Arg	Arg	Glu 330
Arg	Gly	Arg	Pro	Ser	Leu	Tyr	Val 340	Gln	Arg	Asp	Ile	Val	Gln	Glu	Thr 350
Gln	Arg	Glu	Glu	Asp	His	Arg	Arg 360	Glu	Gly	Leu	His	Val	Gly	Arg	Ala 365
Ser	Thr	Pro	Asp	Trp	Val	Ser	Glu 375	Gly	Pro	Gln	Pro	Gly	Leu	Arg	Arg 380
Ala	Leu	Ser	Ser	Asp	Ser	Ile	Leu	Ser	Pro	Ala	Pro	Asp	Ala	Arg	Ala

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385          390          395          400
Ala Asp Pro Ala Pro Glu Val Arg Lys Val Asn Arg Ile Pro Pro Asp
          405          410          415
Ala Tyr Gln Pro Tyr Leu Ser Pro Gly Thr Pro Gln Leu Glu Phe Ser
          420          425          430
Ala Phe Gly Ala Phe Gly Lys Pro Ser Ser Leu Ser Thr Ala Glu Ala
          435          440          445
Lys Ala Ala Thr Ser Pro Lys Ala Thr Met Ser Pro Arg His Leu Ser
          450          455          460
Glu Ser Ser Gly Lys Pro Leu Ser Thr Lys Gln Glu Ala Ser Lys Pro
465          470          475          480
Pro Arg Gly Cys Pro Gln Ala Asn Arg Gly Val Val Arg Trp Glu Tyr
          485          490          495
Phe Arg Leu Arg Pro Leu Arg Phe Arg Ala Pro Asp Glu Pro Gln Gln
          500          505          510
Ala Gln Val Pro His Val Trp Gly Trp Glu Val Ala Gly Ala Pro Ala
          515          520          525
Leu Arg Leu Gln Lys Ser Gln Ser Ser Asp Leu Leu Glu Arg Glu Arg
530          535          540
Glu Ser Val Leu Arg Arg Glu Gln Glu Val Ala Glu Glu Arg Arg Asn
545          550          555          560
Ala Leu Phe Pro Glu Val Phe Ser Pro Thr Pro Asp Glu Asn Ser Asp
          565          570          575
Gln Asn Ser Arg Ser Ser Ser Gln Ala Ser Gly Ile Thr Gly Ser Tyr
          580          585          590
Ser Val Ser Glu Ser Pro Phe Phe Ser Pro Ile His Leu His Ser Asn
          595          600          605
Val Ala Trp Thr Val Glu Asp Pro Val Asp Ser Ala Pro Pro Gly Gln
610          615          620
Arg Lys Lys Glu Gln Trp Tyr Ala Gly Ile Asn Pro Ser Asp Gly Ile
625          630          635          640
Asn Ser Glu Val Leu Glu Ala Ile Arg Val Thr Arg His Lys Asn Ala
          645          650          655
Met Ala Glu Arg Trp Glu Ser Arg Ile Tyr Ala Ser Glu Glu Asp Asp
          660          665          670          672

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<210> 3221
<211> 154
<212> PRT
<213> Homo sapiens

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<400> 3221
Ser Arg Val Phe Phe Phe Phe Phe Phe Pro Ala Phe Lys Met Ser
 1          5          10          15
Lys Arg Gly Arg Gly Gly Ser Ser Gly Ala Lys Phe Arg Ile Ser Leu
          20          25          30
Gly Leu Pro Val Gly Ala Val Ile Asn Cys Ala Asp Asn Thr Gly Ala
          35          40          45
Lys Asn Leu Tyr Ile Ile Ser Val Lys Gly Ile Lys Gly Arg Leu Asn
          50          55          60
Arg Leu Pro Ala Ala Gly Val Gly Asp Met Val Met Ala Thr Val Lys
65          70          75          80
Lys Gly Lys Pro Glu Leu Arg Lys Lys Val His Pro Ala Val Val Ile
          85          90          95
Arg Gln Arg Lys Ser Tyr Arg Arg Lys Asp Gly Val Phe Leu Tyr Phe
          100          105          110
Glu Asp Asn Ala Gly Val Ile Val Asn Asn Lys Gly Glu Met Lys Gly
          115          120          125
Ser Ala Ile Thr Gly Pro Val Ala Lys Glu Cys Ala Asp Leu Trp Pro

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130 135 140
 Arg Ile Ala Ser Asn Ala Gly Ser Ile Ala
 145 150 154

<210> 3222
 <211> 371
 <212> PRT
 <213> Homo sapiens

<400> 3222
 Pro Leu Ile Pro Leu His Pro Ala Asn Arg Ser Pro Ala Thr Met Ala
 1 5 10 15
 Glu Leu Gln Glu Val Gln Ile Thr Glu Glu Lys Pro Leu Leu Pro Gly
 20 25 30
 Gln Thr Pro Glu Ala Ala Lys Thr His Ser Val Glu Thr Pro Tyr Gly
 35 40 45
 Ser Val Thr Phe Thr Val Tyr Gly Thr Pro Lys Pro Lys Arg Pro Ala
 50 55 60
 Ile Leu Thr Tyr His Asp Val Gly Leu Asn Tyr Lys Ser Cys Phe Gln
 65 70 75 80
 Pro Leu Phe Gln Phe Glu Asp Met Gln Glu Ile Ile Gln Asn Phe Val
 85 90 95
 Arg Val His Val Asp Ala Pro Gly Met Glu Glu Gly Ala Pro Val Phe
 100 105 110
 Pro Leu Gly Tyr Gln Tyr Pro Ser Leu Asp Gln Leu Ala Asp Met Ile
 115 120 125
 Pro Cys Val Leu Gln Tyr Leu Asn Phe Ser Thr Ile Ile Gly Val Gly
 130 135 140
 Val Gly Ala Gly Ala Tyr Ile Leu Ala Arg Tyr Ala Leu Asn His Pro
 145 150 155 160
 Asp Thr Val Glu Gly Leu Val Leu Ile Asn Ile Asp Pro Asn Ala Lys
 165 170 175
 Gly Trp Met Asp Trp Ala Ala His Lys Leu Thr Gly Leu Thr Ser Ser
 180 185 190
 Ile Pro Glu Met Ile Leu Gly His Leu Phe Ser Gln Glu Glu Leu Ser
 195 200 205
 Gly Asn Ser Glu Leu Ile Gln Lys Tyr Arg Asn Ile Ile Thr His Ala
 210 215 220
 Pro Asn Leu Asp Asn Ile Glu Leu Tyr Trp Asn Ser Tyr Asn Asn Arg
 225 230 235 240
 Arg Asp Leu Asn Phe Glu Arg Gly Gly Asp Ile Thr Leu Arg Cys Pro
 245 250 255
 Val Met Leu Val Val Gly Asp Gln Ala Pro His Glu Asp Ala Val Val
 260 265 270
 Glu Cys Asn Ser Lys Leu Asp Pro Thr Gln Thr Ser Phe Leu Lys Met
 275 280 285
 Ala Asp Ser Gly Gly Gln Pro Gln Leu Thr Gln Pro Gly Lys Leu Thr
 290 295 300
 Glu Ala Phe Lys Tyr Phe Leu Gln Gly Met Gly Tyr Met Ala Ser Ser
 305 310 315 320
 Cys Met Thr Arg Leu Ser Arg Ser Arg Thr Ala Ser Leu Thr Ser Ala
 325 330 335
 Ala Ser Val Asp Gly Asn Arg Ser Arg Ser Arg Thr Leu Ser Gln Ser
 340 345 350
 Ser Glu Ser Gly Thr Leu Ser Ser Gly Pro Pro Gly His Thr Met Glu
 355 360 365
 Val Ser Cys
 370 371

<210> 3223
 <211> 510
 <212> PRT
 <213> Homo sapiens

<400> 3223
 Ser Ala Arg Arg Trp Gly Ala Ala Gly Ala Gly Pro His Gly Leu His
 1 5 10 15
 Leu Arg Ala His Gly Pro Arg Pro Ser Val Arg Thr Gly Leu Pro Ser
 20 25 30
 Val Gly Arg Gln Ala Ala Gly Ala Ala Met Gly Arg Gly Trp Gly Phe
 35 40 45
 Leu Phe Gly Leu Leu Gly Ala Val Trp Leu Leu Ser Ser Gly His Gly
 50 55 60
 Glu Glu Gln Pro Pro Glu Thr Ala Ala Gln Arg Cys Phe Cys Gln Val
 65 70 75 80
 Ser Gly Tyr Leu Asp Asp Cys Thr Cys Asp Val Glu Thr Ile Asp Arg
 85 90 95
 Phe Asn Asn Tyr Arg Leu Phe Pro Arg Leu Gln Lys Leu Leu Glu Ser
 100 105 110
 Asp Tyr Phe Arg Tyr Tyr Lys Val Asn Leu Lys Arg Pro Cys Pro Phe
 115 120 125
 Trp Asn Asp Ile Ser Gln Cys Gly Arg Arg Asp Cys Ala Val Lys Pro
 130 135 140
 Cys Gln Ser Asp Glu Val Pro Asp Gly Ile Lys Ser Ala Ser Tyr Lys
 145 150 155 160
 Tyr Ser Glu Glu Ala Asn Asn Leu Ile Glu Glu Cys Glu Gln Ala Glu
 165 170 175
 Arg Leu Gly Ala Val Asp Glu Ser Leu Ser Glu Glu Thr Gln Lys Ala
 180 185 190
 Val Leu Gln Trp Thr Lys His Asp Asp Ser Ser Asp Asn Phe Cys Glu
 195 200 205
 Ala Asp Asp Ile Gln Ser Pro Glu Ala Glu Tyr Val Asp Leu Leu Leu
 210 215 220
 Asn Pro Glu Arg Tyr Thr Gly Tyr Lys Gly Pro Asp Ala Trp Lys Ile
 225 230 235 240
 Trp Asn Val Ile Tyr Glu Glu Asn Cys Phe Lys Pro Gln Thr Ile Lys
 245 250 255
 Arg Pro Leu Asn Pro Leu Ala Ser Gly Gln Gly Thr Ser Glu Glu Asn
 260 265 270
 Thr Phe Tyr Ser Trp Leu Glu Gly Leu Cys Val Glu Lys Arg Ala Phe
 275 280 285
 Tyr Arg Leu Ile Ser Gly Leu His Ala Ser Ile Asn Val His Leu Ser
 290 295 300
 Ala Arg Tyr Leu Leu Gln Glu Thr Trp Leu Glu Lys Lys Trp Gly His
 305 310 315 320
 Asn Ile Thr Glu Phe Gln Gln Arg Phe Asp Gly Ile Leu Thr Glu Gly
 325 330 335
 Glu Gly Pro Arg Arg Leu Lys Asn Leu Tyr Phe Leu Tyr Leu Ile Glu
 340 345 350
 Leu Arg Ala Leu Ser Lys Val Leu Pro Phe Phe Glu Arg Pro Asp Phe
 355 360 365
 Gln Leu Phe Thr Gly Asn Lys Ile Gln Asp Glu Glu Asn Lys Met Leu
 370 375 380
 Leu Leu Glu Ile Leu His Glu Ile Lys Ser Phe Pro Leu His Phe Asp
 385 390 395 400
 Glu Asn Ser Phe Phe Ala Gly Asp Lys Lys Glu Ala His Lys Leu Lys
 405 410 415
 Glu Asp Phe Arg Leu His Phe Arg Asn Ile Ser Arg Ile Met Asp Cys
 420 425 430
 Val Gly Cys Phe Lys Cys Arg Leu Trp Gly Lys Leu Gln Thr Gln Gly
 435 440 445
 Leu Gly Thr Ala Leu Lys Ile Leu Phe Ser Glu Lys Leu Ile Ala Asn

450 455 460
 Met Pro Glu Ser Gly Pro Ser Tyr Glu Phe His Leu Thr Arg Gln Glu
 465 470 475 480
 Ile Val Ser Leu Phe Asn Ala Phe Gly Arg Ile Ser Tyr Lys Cys Glu
 485 490 495
 Arg Ile Arg Lys Thr Ser Arg Asn Leu Leu Gln Asn Ile His
 500 505 510

<210> 3224
 <211> 267
 <212> PRT
 <213> Homo sapiens

<400> 3224
 Pro Gly Ser Thr Ile Ser Trp Asp Arg Asp Ala Ala Gly Glu Ser Gly
 1 5 10 15
 Thr Arg Ala Ala Ser Pro Ser Pro Ser Gly Ser Arg Thr Ala Gly Arg
 20 25 30
 Leu Pro Ser Pro Ser Tyr Ser Pro Leu Pro Ala Pro Ser Leu Phe Pro
 35 40 45
 Pro Pro Pro Leu Pro Ala Pro Ala Ala Ser Thr Met Ser Ala Gly Gly
 50 55 60
 Asp Phe Gly Asn Pro Leu Arg Lys Phe Lys Leu Val Phe Leu Gly Glu
 65 70 75 80
 Gln Ser Val Gly Lys Thr Ser Leu Ile Thr Arg Phe Met Tyr Asp Ser
 85 90 95
 Phe Asp Asn Thr Tyr Gln Ala Thr Ile Gly Ile Asp Phe Leu Ser Lys
 100 105 110
 Thr Met Tyr Leu Glu Asp Arg Thr Val Arg Leu Gln Leu Trp Asp Thr
 115 120 125
 Ala Gly Gln Glu Arg Phe Arg Ser Leu Ile Pro Ser Tyr Ile Arg Asp
 130 135 140
 Ser Thr Val Ala Val Val Val Tyr Asp Ile Thr Asn Leu Asn Ser Phe
 145 150 155 160
 Gln Gln Thr Ser Lys Trp Ile Asp Asp Val Arg Thr Glu Arg Gly Ser
 165 170 175
 Asp Val Ile Ile Met Leu Val Gly Asn Lys Thr Asp Leu Ala Asp Lys
 180 185 190
 Arg Gln Ile Thr Ile Glu Glu Gly Glu Gln Arg Ala Lys Glu Leu Ser
 195 200 205
 Val Met Phe Ile Glu Thr Ser Ala Lys Thr Gly Tyr Asn Val Lys Gln
 210 215 220
 Leu Phe Arg Arg Val Ala Ser Ala Leu Pro Gly Met Glu Asn Val Gln
 225 230 235 240
 Glu Lys Ser Lys Glu Gly Met Ile Asp Ile Lys Leu Asp Lys Pro Gln
 245 250 255
 Glu Pro Pro Ala Ser Glu Gly Gly Cys Ser Cys
 260 265 267

<210> 3225
 <211> 1684
 <212> PRT
 <213> Homo sapiens

<400> 3225
 Pro Glu Val Thr Lys Pro Ser Leu Ser Gln Pro Thr Ala Ala Ser Pro
 1 5 10 15
 Ile Gly Ser Ser Pro Ser Pro Pro Val Asn Gly Gly Asn Asn Ala Lys

4929

530	535	540
Asp Ser His Asn Ser Gly Arg Arg Ser Tyr Arg Pro Thr His Pro Asp		
545	550	555
Cys Gln Ala Val Leu Gln Thr Leu Leu Ser Arg Thr Asp Leu Asp Pro		
	565	570
Arg Val Leu Ser Asn Thr Gly Trp Gly Gln Thr Gln Ile Lys Gln Asp		
	580	585
Thr Val Trp Asp Ile Glu Glu Val Pro Arg Pro Glu Gly Lys Ser Asp		
	595	600
Lys Gly Thr Glu Gly Trp Glu Ser Ala Ala Thr Gln Thr Lys Asn Ser		
	610	615
Gly Gly Trp Gly Asp Ala Pro Ser Gln Ser Asn Gln Met Lys Ser Gly		
	625	630
Trp Gly Glu Leu Ser Ala Ser Thr Glu Trp Lys Asp Pro Lys Asn Thr		
	645	650
Gly Gly Trp Asn Asp Tyr Lys Asn Asn Asn Ser Ser Asn Trp Gly Gly		
	660	665
Gly Arg Pro Asp Glu Lys Thr Pro Ser Ser Trp Asn Glu Asn Pro Ser		
	675	680
Lys Asp Gln Gly Trp Gly Gly Gly Arg Gln Pro Asn Gln Gly Trp Ser		
	690	695
Ser Gly Lys Asn Gly Trp Gly Glu Glu Val Asp Gln Thr Lys Asn Ser		
	705	710
Asn Trp Glu Ser Ser Ala Ser Lys Pro Val Ser Gly Trp Gly Glu Gly		
	725	730
Gly Gln Asn Glu Ile Gly Thr Trp Gly Asn Gly Gly Asn Ala Ser Leu		
	740	745
Ala Ser Lys Gly Gly Trp Glu Asp Cys Lys Arg Ser Pro Ala Trp Asn		
	755	760
Glu Thr Gly Arg Gln Pro Asn Ser Trp Asn Lys Gln His Gln Gln Gln		
	770	775
Gln Pro Pro Gln Gln Pro Pro Pro Pro Gln Pro Glu Ala Ser Gly Ser		
	785	790
Trp Gly Gly Pro Pro Pro Pro Pro Pro Gly Asn Val Arg Pro Ser Asn		
	805	810
Ser Ser Trp Ser Ser Gly Pro Gln Pro Ala Thr Pro Lys Asp Glu Glu		
	820	825
Pro Ser Gly Trp Glu Glu Pro Ser Pro Gln Ser Ile Ser Arg Lys Met		
	835	840
Asp Ile Asp Asp Gly Thr Ser Ala Trp Gly Asp Pro Asn Ser Tyr Asn		
	850	855
Tyr Lys Asn Val Asn Leu Trp Asp Lys Asn Ser Gln Gly Gly Pro Ala		
	865	870
Pro Arg Glu Pro Asn Leu Pro Thr Pro Met Thr Ser Lys Ser Ala Ser		
	885	890
Asp Ser Lys Ser Met Gln Asp Gly Trp Gly Glu Ser Asp Gly Pro Val		
	900	905
Thr Gly Ala Arg His Pro Ser Trp Glu Glu Glu Glu Asp Gly Gly Val		
	915	920
Trp Asn Thr Thr Gly Ser Gln Gly Ser Ala Ser Ser His Asn Ser Ala		
	930	935
Ser Trp Gly Gln Gly Gly Lys Lys Gln Met Lys Cys Ser Leu Lys Gly		
	945	950
Gly Asn Asn Asp Ser Trp Met Asn Pro Leu Ala Lys Gln Phe Ser Asn		
	965	970
Met Gly Leu Leu Ser Gln Thr Glu Asp Asn Pro Ser Ser Lys Met Asp		
	980	985
Leu Ser Val Gly Ser Leu Ser Asp Lys Lys Phe Asp Val Asp Lys Arg		
	995	1000
Ala Met Asn Leu Gly Asp Phe Asn Asp Ile Met Arg Lys Asp Arg Ser		
	1010	1015
Gly Phe Arg Pro Pro Asn Ser Lys Asp Met Gly Thr Thr Asp Ser Gly		
	1025	1030
Pro Tyr Phe Glu Lys Gly Gly Ser His Gly Leu Phe Gly Asn Ser Thr		
	1035	1040

	1045		1050		1055										
Ala	Gln	Ser	Arg	Gly	Leu	His	Thr	Pro	Val	Gln	Pro	Leu	Asn	Ser	Ser
	1060							1065					1070		
Pro	Ser	Leu	Arg	Ala	Gln	Val	Pro	Pro	Gln	Phe	Ile	Ser	Pro	Gln	Val
	1075						1080						1085		
Ser	Ala	Ser	Met	Leu	Lys	Gln	Phe	Pro	Asn	Ser	Gly	Leu	Ser	Pro	Gly
	1090					1095					1100				
Leu	Phe	Asn	Val	Gly	Pro	Gln	Leu	Ser	Pro	Gln	Gln	Ile	Ala	Met	Leu
1105					1110					1115					1120
Ser	Gln	Leu	Pro	Gln	Ile	Pro	Gln	Phe	Gln	Leu	Ala	Cys	Gln	Leu	Leu
			1125					1130						1135	
Leu	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Leu	Leu	Gln	Asn	Gln	Arg	Lys	Ile
			1140					1145						1150	
Ser	Gln	Ala	Val	Arg	Gln	Gln	Gln	Glu	Gln	Gln	Leu	Ala	Arg	Met	Val
	1155						1160						1165		
Ser	Ala	Leu	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Arg	Gln	Pro	Gly	Met
	1170					1175					1180				
Lys	His	Ser	Pro	Ser	His	Pro	Val	Gly	Pro	Lys	Pro	His	Leu	Asp	Asn
1185					1190					1195					1200
Met	Val	Pro	Asn	Ala	Leu	Asn	Val	Gly	Leu	Pro	Asp	Leu	Gln	Thr	Lys
			1205						1210						1215
Gly	Pro	Ile	Pro	Gly	Tyr	Gly	Ser	Gly	Phe	Ser	Ser	Gly	Gly	Met	Asp
			1220					1225							1230
Tyr	Gly	Met	Val	Gly	Gly	Lys	Glu	Ala	Gly	Thr	Glu	Ser	Arg	Phe	Lys
	1235					1240									1245
Gln	Trp	Thr	Ser	Met	Met	Glu	Gly	Leu	Pro	Ser	Val	Ala	Thr	Gln	Glu
	1250					1255						1260			
Ala	Asn	Met	His	Lys	Asn	Gly	Ala	Ile	Val	Ala	Pro	Gly	Lys	Thr	Arg
1265					1270					1275					1280
Gly	Gly	Ser	Pro	Tyr	Asn	Gln	Phe	Asp	Ile	Ile	Pro	Gly	Asp	Thr	Leu
			1285					1290							1295
Gly	Gly	His	Thr	Gly	Pro	Ala	Gly	Asp	Ser	Trp	Leu	Pro	Ala	Lys	Ser
			1300					1305							1310
Pro	Pro	Thr	Asn	Lys	Ile	Gly	Ser	Lys	Ser	Ser	Asn	Ala	Ser	Trp	Pro
			1315					1320							1325
Pro	Glu	Phe	Gln	Pro	Gly	Val	Pro	Trp	Lys	Gly	Ile	Gln	Asn	Ile	Asp
	1330					1335									1340
Pro	Glu	Ser	Asp	Pro	Tyr	Val	Thr	Pro	Gly	Ser	Val	Leu	Gly	Gly	Thr
1345					1350					1355					1360
Ala	Thr	Ser	Pro	Ile	Val	Asp	Thr	Asp	His	Gln	Leu	Leu	Arg	Asp	Asn
			1365					1370							1375
Thr	Thr	Gly	Ser	Asn	Ser	Ser	Leu	Asn	Thr	Ser	Leu	Pro	Ser	Pro	Gly
			1380					1385							1390
Ala	Trp	Pro	Tyr	Ser	Ala	Ser	Asp	Asn	Ser	Phe	Thr	Asn	Val	His	Ser
	1395							1400							1405
Thr	Ser	Ala	Lys	Phe	Pro	Asp	Tyr	Lys	Ser	Thr	Trp	Ser	Pro	Asp	Pro
	1410						1415								1420
Ile	Gly	His	Asn	Pro	Thr	His	Leu	Ser	Asn	Lys	Met	Trp	Lys	Asn	His
1425					1430					1435					1440
Ile	Ser	Ser	Arg	Asn	Thr	Thr	Pro	Leu	Pro	Arg	Pro	Pro	Pro	Gly	Leu
			1445							1450					1455
Thr	Asn	Pro	Lys	Pro	Ser	Ser	Pro	Trp	Ser	Ser	Thr	Ala	Pro	Arg	Ser
			1460					1465							1470
Val	Arg	Gly	Trp	Gly	Thr	Gln	Asp	Ser	Arg	Leu	Ala	Ser	Ala	Ser	Thr
	1475							1480							1485
Trp	Ser	Asp	Gly	Gly	Ser	Val	Arg	Pro	Ser	Tyr	Trp	Leu	Val	Leu	His
	1490					1495					1500				
Asn	Leu	Thr	Pro	Gln	Ile	Asp	Gly	Ser	Thr	Leu	Arg	Thr	Ile	Cys	Met
1505					1510					1515					1520
Gln	His	Gly	Pro	Leu	Leu	Thr	Phe	His	Leu	Asn	Leu	Thr	Gln	Gly	Thr
			1525							1530					1535
Ala	Leu	Ile	Arg	Tyr	Ser	Thr	Lys	Gln	Glu	Ala	Ala	Lys	Ala	Gln	Thr
			1540							1545					1550
Ala	Leu	His	Met	Cys	Val	Leu	Gly	Asn	Thr	Thr	Ile	Leu	Ala	Glu	Phe

1555 1560 1565
 Ala Thr Asp Asp Glu Val Ser Arg Phe Leu Ala Gln Ala Gln Pro Pro
 1570 1575 1580
 Thr Pro Ala Ala Thr Pro Ser Ala Pro Ala Ala Gly Trp Gln Ser Leu
 1585 1590 1595 1600
 Glu Thr Gly Gln Asn Gln Ser Asp Pro Val Gly Pro Ala Leu Asn Leu
 1605 1610 1615
 Phe Gly Gly Ser Thr Gly Leu Gly Gln Trp Ser Ser Ser Ala Gly Gly
 1620 1625 1630
 Ser Ser Gly Ala Asp Leu Ala Gly Ala Ser Leu Trp Gly Pro Pro Asn
 1635 1640 1645
 Tyr Ser Ser Ser Leu Trp Gly Val Pro Thr Val Glu Asp Pro His Arg
 1650 1655 1660
 Met Gly Ser Pro Ala Pro Leu Leu Pro Gly Asp Leu Leu Gly Gly Gly
 1665 1670 1675 1680
 Ser Asp Ser Ile
 1684

<210> 3226
 <211> 395
 <212> PRT
 <213> Homo sapiens

<400> 3226
 Val Pro Trp Lys Arg Gln Asp Glu Gln Leu Ser Leu Gln Val Glu Thr
 1 5 10 15
 Leu Tyr Leu Asp Ser Pro Ala Val Ile His Leu Leu Ser Pro Thr Phe
 20 25 30
 Leu Pro Pro Ser Ser Leu Pro Pro Phe Leu Gln Ile Val Asp Ser Ser
 35 40 45
 Ser Ser Ala Cys Thr Leu Asp Ser Phe Phe Pro Phe Leu Ala Pro Trp
 50 55 60
 Asp Ser Pro Gln Asp Cys Gly Phe Lys Asp His Gln Pro Leu Thr Leu
 65 70 75 80
 Gln Ala Leu Thr Val Glu Leu Ala Arg Trp Thr Leu Met Leu Leu Leu
 85 90 95
 Ser Thr Ala Met Tyr Gly Ala His Ala Pro Leu Leu Ala Leu Cys His
 100 105 110
 Val Asp Gly Arg Val Pro Phe Arg Pro Ser Ser Ala Val Leu Leu Thr
 115 120 125
 Glu Leu Thr Lys Leu Leu Leu Cys Ala Phe Ser Leu Leu Val Gly Trp
 130 135 140
 Gln Ala Trp Pro Gln Gly Pro Pro Pro Trp Arg Gln Ala Ala Pro Phe
 145 150 155 160
 Ala Leu Ser Ala Leu Leu Tyr Gly Ala Asn Asn Asn Leu Val Ile Tyr
 165 170 175
 Leu Gln Arg Tyr Met Asp Pro Ser Thr Tyr Gln Val Leu Ser Asn Leu
 180 185 190
 Lys Ile Gly Ser Thr Ala Val Leu Tyr Cys Leu Cys Leu Arg His Arg
 195 200 205
 Leu Ser Val Arg Gln Gly Leu Ala Leu Leu Leu Leu Met Ala Ala Gly
 210 215 220
 Ala Cys Tyr Ala Ala Gly Gly Leu Gln Val Pro Gly Asn Thr Leu Pro
 225 230 235 240
 Ser Pro Pro Pro Ala Ala Ala Ser Pro Met Pro Leu His Ile Thr
 245 250 255
 Pro Leu Gly Leu Leu Leu Ile Leu Tyr Cys Leu Ile Ser Gly Leu
 260 265 270
 Ser Ser Val Tyr Thr Glu Leu Leu Met Lys Arg Gln Arg Leu Pro Leu
 275 280 285
 Ala Leu Gln Asn Leu Phe Leu Tyr Thr Phe Gly Val Leu Leu Asn Leu

290 295 300
 Gly Leu His Ala Gly Gly Ser Gly Pro Gly Leu Leu Glu Gly Phe
 305 310 315 320
 Ser Gly Trp Ala Ala Leu Val Val Leu Ser Gln Ala Leu Asn Gly Leu
 325 330 335
 Leu Met Ser Ala Val Met Lys His Gly Ser Ser Ile Thr Arg Leu Phe
 340 345 350
 Val Val Ser Cys Ser Leu Val Val Asn Ala Val Leu Ser Ala Val Leu
 355 360 365
 Leu Arg Leu Gln Leu Thr Ala Ala Phe Phe Leu Ala Thr Leu Leu Ile
 370 375 380
 Gly Leu Ala Met Arg Leu Tyr Tyr Gly Ser Arg
 385 390 395

<210> 3227
 <211> 226
 <212> PRT
 <213> Homo sapiens

<400> 3227
 Arg Ser Thr Arg Ala Arg Thr Arg Arg Pro Gly Leu Arg Ala Val Pro
 1 5 10 15
 Leu Pro Val Gly Gly Phe Leu Gly Lys Met Lys Trp Val Trp Ala Leu
 20 25 30
 Leu Leu Leu Ala Ala Leu Gly Ser Gly Arg Ala Glu Arg Asp Cys Arg
 35 40 45
 Val Ser Ser Phe Arg Val Lys Glu Asn Phe Asp Lys Ala Arg Phe Ser
 50 55 60
 Gly Thr Trp Tyr Ala Met Ala Lys Lys Asp Pro Glu Gly Leu Phe Leu
 65 70 75 80
 Gln Asp Asn Ile Val Ala Glu Phe Ser Val Asp Glu Thr Gly Gln Met
 85 90 95
 Ser Ala Thr Ala Lys Gly Arg Val Arg Leu Leu Asn Asn Trp Asp Val
 100 105 110
 Cys Ala Asp Met Val Gly Thr Phe Thr Asp Thr Glu Asp Pro Ala Lys
 115 120 125
 Phe Lys Met Lys Tyr Trp Gly Val Ala Ser Phe Leu Gln Lys Gly Asn
 130 135 140
 Asp Asp His Trp Ile Val Asp Thr Asp Tyr Asp Thr Tyr Ala Val Gln
 145 150 155 160
 Tyr Ser Cys Arg Leu Leu Asn Leu Asp Gly Thr Cys Ala Asp Ser Tyr
 165 170 175
 Ser Phe Val Phe Ser Arg Asp Pro Asn Gly Leu Pro Pro Glu Ala Gln
 180 185 190
 Lys Ile Val Arg Gln Arg Gln Glu Glu Leu Cys Leu Ala Arg Gln Tyr
 195 200 205
 Arg Leu Ile Val His Asn Gly Tyr Cys Asp Gly Arg Ser Glu Arg Asn
 210 215 220
 Leu Leu
 225 226

<210> 3228
 <211> 225
 <212> PRT
 <213> Homo sapiens

<400> 3228
 Gln Gln Glu Ser Pro Ala Ala Gly Ala Ala Arg Met Asn Cys Lys Glu

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      1           5           10           15
Gly Thr Asp Ser Cys Gly Cys Arg Gly Asn Asp Glu Lys Lys Met
      20           25           30
Leu Lys Cys Val Val Val Gly Asp Gly Ala Val Gly Lys Thr Cys Leu
      35           40           45
Leu Met Ser Tyr Ala Asn Asp Ala Phe Pro Glu Glu Tyr Val Pro Thr
      50           55           60
Val Phe Asp His Tyr Ala Val Thr Val Thr Val Gly Gly Lys Gln His
      65           70           75           80
Leu Leu Gly Leu Tyr Asp Thr Ala Gly Gln Glu Asp Tyr Asn Gln Leu
      85           90           95
Arg Pro Leu Ser Tyr Pro Asn Thr Asp Val Phe Leu Ile Cys Phe Ser
      100          105          110
Val Val Asn Pro Ala Ser Tyr His Asn Val Gln Glu Glu Trp Val Pro
      115          120          125
Glu Leu Lys Asp Cys Met Pro His Val Pro Tyr Val Leu Ile Gly Thr
      130          135          140
Gln Ile Asp Leu Arg Asp Asp Pro Lys Thr Leu Ala Arg Leu Leu Tyr
      145          150          155          160
Met Lys Glu Lys Pro Leu Thr Tyr Glu His Gly Val Lys Leu Ala Lys
      165          170          175
Ala Ile Gly Ala Gln Cys Tyr Leu Glu Cys Ser Ala Leu Thr Gln Lys
      180          185          190
Gly Leu Lys Ala Val Phe Asp Glu Ala Ile Leu Thr Ile Phe His Pro
      195          200          205
Lys Lys Lys Lys Lys Arg Cys Ser Glu Gly His Ser Cys Cys Ser Ile
      210          215          220
Ile
225

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<210> 3229
<211> 232
<212> PRT
<213> Homo sapiens

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      <400> 3229
Ala Ile Ser Ala Gly Arg Ser Ala Lys Met Gln Leu Lys Pro Met Glu
      1           5           10           15
Ile Asn Pro Glu Met Leu Asn Lys Val Leu Ser Arg Leu Gly Val Ala
      20           25           30
Gly Gln Trp Arg Phe Val Asp Val Leu Gly Leu Glu Glu Ser Leu
      35           40           45
Gly Ser Val Pro Ala Pro Ala Cys Ala Leu Leu Leu Leu Phe Pro Leu
      50           55           60
Thr Ala Gln His Glu Asn Phe Arg Lys Lys Gln Ile Glu Glu Leu Lys
      65           70           75           80
Gly Gln Glu Val Ser Pro Lys Val Tyr Phe Met Lys Gln Thr Ile Gly
      85           90           95
Asn Ser Cys Gly Thr Ile Gly Leu Ile His Ala Val Ala Asn Asn Gln
      100          105          110
Asp Lys Leu Gly Phe Glu Asp Gly Ser Val Leu Lys Gln Phe Leu Ser
      115          120          125
Glu Thr Glu Lys Met Ser Pro Glu Asp Arg Ala Lys Cys Phe Glu Lys
      130          135          140
Asn Glu Ala Ile Gln Ala Ala His Asp Ala Val Ala Gln Glu Gly Gln
      145          150          155          160
Cys Arg Val Asp Asp Lys Val Asn Phe His Phe Ile Leu Phe Asn Asn
      165          170          175
Val Asp Gly His Leu Tyr Glu Leu Asp Gly Arg Met Pro Phe Pro Val
      180          185          190
Asn His Gly Ala Ser Ser Glu Asp Thr Leu Leu Lys Asp Ala Ala Lys

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195	200	205
Val Cys Arg Glu Phe Thr	Glu Arg Glu Gln Gly	Glu Val Arg Phe Ser
210	215	220
Ala Val Ala Leu Cys Lys	Ala Ala	
225	230	232

<210> 3230
 <211> 398
 <212> PRT
 <213> Homo sapiens

<400> 3230

Gly Asp Ala Ala Thr Thr Ala Cys Ala Pro Pro Asp Trp Phe Leu Gly	
1 5 10 15	
Pro Arg Lys Leu Ala Ala Gly Pro Ala Gly Gly Gly Met Leu Pro Arg	
20 25 30	
Arg Leu Leu Ala Ala Trp Leu Ala Gly Thr Arg Gly Gly Gly Leu Leu	
35 40 45	
Ala Leu Leu Ala Asn Gln Cys Arg Phe Val Thr Gly Leu Arg Val Arg	
50 55 60	
Arg Ala Gln Gln Ile Ala Gln Leu Tyr Gly Arg Leu Tyr Ser Glu Ser	
65 70 75 80	
Ser Arg Arg Val Leu Leu Gly Arg Leu Trp Arg Arg Leu His Gly Arg	
85 90 95	
Pro Gly His Ala Ser Ala Leu Met Ala Ala Leu Ala Gly Val Phe Val	
100 105 110	
Trp Asp Glu Glu Arg Ile Gln Glu Glu Leu Gln Arg Ser Ile Asn	
115 120 125	
Glu Met Lys Arg Leu Glu Glu Met Ser Asn Met Phe Gln Ser Ser Gly	
130 135 140	
Val Gln His His Pro Pro Glu Pro Lys Ala Gln Thr Glu Gly Asn Glu	
145 150 155 160	
Asp Ser Glu Gly Lys Glu Gln Arg Trp Glu Met Val Met Asp Lys Lys	
165 170 175	
His Phe Lys Leu Trp Arg Arg Pro Ile Thr Gly Thr His Leu Tyr Gln	
180 185 190	
Tyr Arg Val Phe Gly Thr Tyr Thr Asp Val Thr Pro Arg Gln Phe Phe	
195 200 205	
Asn Val Gln Leu Asp Thr Glu Tyr Arg Lys Lys Trp Asp Ala Leu Val	
210 215 220	
Ile Lys Leu Glu Val Ile Glu Arg Asp Val Val Ser Gly Ser Glu Val	
225 230 235 240	
Leu His Trp Val Thr His Phe Pro Tyr Pro Met Tyr Ser Arg Asp Tyr	
245 250 255	
Val Tyr Val Arg Arg Tyr Ser Val Asp Gln Glu Asn Asn Met Met Val	
260 265 270	
Leu Val Ser Arg Ala Val Glu His Pro Ser Val Pro Glu Ser Pro Glu	
275 280 285	
Phe Val Arg Val Arg Ser Tyr Glu Ser Gln Met Val Ile Arg Pro His	
290 295 300	
Lys Ser Phe Asp Glu Asn Gly Phe Asp Tyr Leu Leu Thr Tyr Ser Asp	
305 310 315 320	
Asn Pro Gln Thr Val Phe Pro Arg Tyr Cys Val Ser Trp Met Val Ser	
325 330 335	
Ser Gly Met Pro Asp Phe Leu Glu Lys Leu His Met Ala Thr Leu Lys	
340 345 350	
Ala Lys Asn Met Glu Ile Lys Val Lys Asp Tyr Ile Ser Ala Lys Pro	
355 360 365	
Leu Glu Met Ser Ser Glu Ala Lys Ala Thr Ser Gln Ser Ser Glu Arg	
370 375 380	
Lys Asn Glu Gly Ser Cys Gly Pro Ala Arg Ile Glu Tyr Ala	

385

390

395

398

<210> 3231
 <211> 509
 <212> PRT
 <213> Homo sapiens

<400> 3231
 Phe Val Pro Glu Pro Pro Glu Ala Gly Ala Ser Ser Pro Cys Ala Pro
 1 5 10 15
 Gly Asp Pro Asp Met Ser Phe Arg Lys Val Val Arg Gln Ser Lys Phe
 20 25 30
 Arg His Val Phe Gly Gln Pro Val Lys Asn Asp Gln Cys Tyr Glu Asp
 35 40 45
 Ile Arg Val Ser Arg Val Thr Trp Asp Ser Thr Phe Cys Ala Val Asn
 50 55 60
 Pro Lys Phe Leu Ala Val Ile Val Glu Ala Ser Gly Gly Gly Ala Phe
 65 70 75 80
 Leu Val Leu Pro Leu Ser Lys Thr Gly Arg Ile Asp Lys Ala Tyr Pro
 85 90 95
 Thr Val Cys Gly His Thr Gly Pro Val Leu Asp Ile Asp Trp Cys Pro
 100 105 110
 His Asn Asp Glu Val Ile Ala Ser Gly Ser Glu Asp Cys Thr Val Met
 115 120 125
 Val Trp Gln Ile Pro Glu Asn Gly Leu Thr Ser Pro Leu Thr Glu Pro
 130 135 140
 Val Val Val Leu Glu Gly His Thr Lys Arg Val Gly Ile Ile Ala Trp
 145 150 155 160
 His Pro Thr Ala Arg Asn Val Leu Leu Ser Ala Gly Cys Asp Asn Val
 165 170 175
 Val Leu Ile Trp Asn Val Gly Thr Ala Glu Glu Leu Tyr Arg Leu Asp
 180 185 190
 Ser Leu His Pro Asp Leu Ile Tyr Asn Val Ser Trp Asn His Asn Gly
 195 200 205
 Ser Leu Phe Cys Ser Ala Cys Lys Asp Lys Ser Val Arg Ile Ile Asp
 210 215 220
 Pro Arg Arg Gly Thr Leu Val Ala Glu Arg Glu Lys Ala His Glu Gly
 225 230 235 240
 Ala Arg Pro Met Arg Ala Ile Phe Leu Ala Asp Gly Lys Val Phe Thr
 245 250 255
 Thr Gly Phe Ser Arg Met Ser Glu Arg Gln Leu Ala Leu Trp Asp Pro
 260 265 270
 Glu Asn Leu Glu Glu Pro Met Ala Leu Gln Glu Leu Asp Ser Ser Asn
 275 280 285
 Gly Ala Leu Leu Pro Phe Tyr Asp Pro Asp Thr Ser Val Val Tyr Val
 290 295 300
 Cys Gly Lys Gly Asp Ser Ser Ile Arg Tyr Phe Glu Ile Thr Glu Glu
 305 310 315 320
 Pro Pro Tyr Ile His Phe Leu Asn Thr Phe Thr Ser Lys Glu Pro Gln
 325 330 335
 Arg Gly Met Gly Ser Met Pro Lys Arg Gly Leu Glu Val Ser Lys Cys
 340 345 350
 Glu Ile Ala Arg Phe Tyr Lys Leu His Glu Arg Lys Cys Glu Pro Ile
 355 360 365
 Val Met Thr Val Pro Arg Lys Ser Asp Leu Phe Gln Asp Asp Leu Tyr
 370 375 380
 Pro Asp Thr Ala Gly Pro Glu Ala Ala Leu Glu Ala Glu Glu Trp Val
 385 390 395 400
 Ser Gly Arg Asp Ala Asp Pro Ile Leu Ile Ser Leu Arg Glu Ala Tyr
 405 410 415
 Val Pro Ser Lys Gln Arg Asp Leu Lys Ile Ser Arg Arg Asn Val Leu

<400> 3233
Arg Leu Arg Glu Asp Asp Arg Arg Gly Leu Pro Leu Ser Ser Pro Leu
1 5 10 15
Trp Thr Glu Pro Pro Leu Ser Cys Cys Leu Pro Ala Thr Tyr Pro Ala

										20											25											30
Asp	Met	Gly	Thr	Ala	Gly	Ala	Met	Gln	Leu	Cys	Trp	Val	Ile	Leu	Gly																	
										35											40											45
Phe	Leu	Leu	Phe	Arg	Gly	His	Asn	Ser	Gln	Pro	Thr	Met	Thr	Gln	Thr																	
										50											55											60
Ser	Ser	Ser	Gln	Gly	Gly	Leu	Gly	Gly	Leu	Ser	Leu	Thr	Thr	Glu	Pro																	
										65											70											75
Val	Ser	Ser	Asn	Pro	Gly	Tyr	Ile	Pro	Ser	Ser	Glu	Ala	Asn	Arg	Pro																	
										85											90											95
Ser	His	Leu	Ser	Ser	Thr	Gly	Thr	Pro	Gly	Ala	Gly	Val	Pro	Ser	Ser																	
										100											105											110
Gly	Arg	Asp	Gly	Gly	Thr	Ser	Arg	Asp	Thr	Phe	Gln	Thr	Val	Pro	Pro																	
										115											120											125
Asn	Ser	Thr	Thr	Met	Ser	Leu	Ser	Met	Arg	Glu	Asp	Ala	Thr	Ile	Leu																	
										130											135											140
Pro	Ser	Pro	Thr	Ser	Glu	Thr	Val	Leu	Thr	Val	Ala	Ala	Phe	Gly	Val																	
										145											150											155
Ile	Ser	Phe	Ile	Val	Ile	Leu	Val	Val	Val	Ile	Ile	Leu	Val	Gly																		
										165											170											175
Val	Val	Ser	Leu	Arg	Phe	Lys	Cys	Arg	Lys	Ser	Lys	Glu	Ser	Glu	Asp																	
										180											185											190
Pro	Gln	Lys	Pro	Gly	Ser	Ser	Gly	Leu	Ser	Glu	Ser	Cys	Ser	Thr	Ala																	
										195											200											205
Asn	Gly	Glu	Lys	Asp	Ser	Ile	Thr	Leu	Ile	Ser	Met	Lys	Asn	Ile	Asn																	
										210											215											220
Met	Asn	Asn	Gly	Lys	Gln	Ser	Leu	Ser	Ala	Glu	Lys	Val	Leu																			
										225											230											235
																														238		

<210> 3234

<211> 1041

<212> PRT

<213> Homo sapiens

<400> 3234

Ala	Gly	Asp	Cys	Gly	Arg	Leu	Gly	Val	Gly	Gly	Ser	Glu	Phe	Pro	Trp																		
1											5											10											15
Glu	Gly	Ser	Ala	Leu	Gly	Ala	Ser	Pro	Leu	Pro	Pro	Ile	Cys	Leu	Gln																		
										20											25											30	
Ser	Arg	Thr	Trp	Leu	Leu	Arg	Ala	Pro	Ala	Pro	Ala	Glu	Leu	Gly	Glu																		
										35											40											45	
Leu	Glu	Glu	Val	Ala	Ala	Gly	Arg	Gly	Asp	Val	Trp	Glu	Pro	Phe	Leu																		
										50											55											60	
Asp	Ser	Pro	Gly	Arg	Glu	Glu	Ser	Leu	Gln	Glu	Ala	Ser	Pro	Arg	Leu																		
										65											70											75	
Ala	Asp	His	Gly	Ser	Ser	Ser	Gly	Gly	Gly	Trp	Glu	Val	Lys	Arg	Ser																		
										85											90											95	
Gln	Arg	Leu	Arg	Arg	Gly	Pro	Ser	Ser	Pro	Arg	Arg	Pro	Tyr	Gln	Asp																		
										100											105											110	
Met	Glu	Tyr	Glu	Arg	Arg	Gly	Gly	Arg	Gly	Asp	Arg	Thr	Gly	Arg	Tyr																		
										115											120											125	
Gly	Ala	Thr	Asp	Arg	Ser	Gln	Asp	Asp	Gly	Gly	Glu	Asn	Arg	Ser	Arg																		
										130											135											140	
Asp	His	Asp	Tyr	Arg	Asp	Met	Asp	Tyr	Arg	Ser	Tyr	Pro	Arg	Glu	Tyr																		
										145											150											155	
Gly	Ser	Gln	Glu	Gly	Lys	His	Asp	Tyr	Asp	Asp	Ser	Ser	Glu	Glu	Gln																		
										165											170											175	
Ser	Ala	Glu	Asp	Ser	Tyr	Glu	Ala	Ser	Pro	Gly	Ser	Glu	Thr	Gln	Arg																		
										180											185											190	
Arg	Arg	Arg	Arg	Arg	His	Arg	His	Ser	Pro	Thr	Gly	Pro	Pro	Gly	Phe																		
										195											200											205	
Pro	Arg	Asp	Gly	Asp	Tyr	Arg	Asp	Gln	Asp	Tyr	Arg	Thr	Glu	Gln	Gly																		

210	215	220
Glu Glu Glu Glu Glu	Glu Glu Asp Glu Glu	Glu Glu Glu Lys Ala Ser
225	230	235
Asn Ile Val Met Leu	Arg Met Leu Pro Gln	Ala Ala Thr Glu Asp Asp
245	250	255
Ile Arg Gly Gln Leu	Gln Ser His Gly Val	Gln Ala Arg Glu Val Arg
260	265	270
Leu Met Arg Asn Lys	Ser Ser Gly Gln Ser	Arg Gly Phe Ala Phe Val
275	280	285
Glu Phe Ser His Leu	Gln Asp Ala Thr Arg	Trp Met Glu Ala Asn Gln
290	295	300
His Ser Leu Asn Ile	Leu Gly Gln Lys Val	Ser Met His Tyr Ser Asp
305	310	315
Pro Lys Pro Lys Ile	Asn Glu Asp Trp Leu	Cys Asn Lys Cys Gly Val
325	330	335
Gln Asn Phe Lys Arg	Arg Glu Lys Cys Phe	Lys Cys Gly Val Pro Lys
340	345	350
Ser Glu Ala Glu Gln	Lys Leu Pro Leu Gly	Thr Arg Leu Asp Gln Gln
355	360	365
Thr Leu Pro Leu Gly	Gly Arg Glu Leu Ser	Gln Gly Leu Leu Pro Leu
370	375	380
Pro Gln Pro Tyr Gln	Ala Gln Gly Val Leu	Ala Ser Gln Ala Leu Ser
385	390	395
Gln Gly Ser Glu Pro	Ser Ser Glu Asn Ala	Asn Asp Thr Ile Ile Leu
405	410	415
Arg Asn Leu Asn Pro	His Ser Thr Met Asp	Ser Ile Leu Gly Ala Leu
420	425	430
Ala Pro Tyr Ala Val	Leu Ser Ser Ser Asn	Val Arg Val Ile Lys Asp
435	440	445
Lys Gln Thr Gln Leu	Asn Arg Gly Phe Ala	Phe Ile Gln Leu Ser Thr
450	455	460
Ile Glu Ala Ala Gln	Leu Leu Gln Ile Leu	Gln Ala Leu His Pro Pro
465	470	475
Leu Thr Ile Asp Gly	Lys Thr Ile Asn Val	Glu Phe Ala Lys Gly Ser
485	490	495
Lys Arg Asp Met Ala	Ser Asn Glu Gly Ser	Arg Ile Ser Ala Ala Ser
500	505	510
Val Ala Ser Thr Ala	Ile Ala Ala Gln Trp	Ala Ile Ser Gln Ala
515	520	525
Ser Gln Gly Gly Glu	Gly Thr Trp Ala Thr	Ser Glu Glu Pro Pro Val
530	535	540
Asp Tyr Ser Tyr Tyr	Gln Gln Asp Glu Gly	Tyr Gly Asn Ser Gln Gly
545	550	555
Thr Glu Ser Ser Leu	Tyr Ala His Gly Tyr	Leu Lys Gly Thr Lys Gly
565	570	575
Pro Gly Ile Thr Gly	Thr Lys Gly Asp Pro	Thr Gly Ala Gly Pro Glu
580	585	590
Ala Ser Leu Glu Pro	Gly Ala Asp Ser Val	Ser Met Gln Ala Phe Ser
595	600	605
Arg Pro Gln Pro Gly	Ala Ala Pro Gly Ile	Tyr Gln Gln Ser Ala Glu
610	615	620
Ala Ser Ser Ser Gln	Gly Thr Ala Ala Asn	Ser Gln Ser Tyr Thr Ile
625	630	635
Met Ser Pro Ala Val	Leu Lys Ser Glu Leu	Gln Ser Pro Thr His Pro
645	650	655
Ser Ser Ala Leu Pro	Pro Ala Thr Ser Pro	Thr Ala Gln Glu Ser Tyr
660	665	670
Ser Gln Tyr Pro Val	Pro Asp Val Ser Thr	Tyr Gln Tyr Asp Glu Thr
675	680	685
Ser Gly Tyr Tyr Tyr	Asp Pro Gln Thr Gly	Leu Tyr Tyr Asp Pro Asn
690	695	700
Ser Gln Tyr Tyr Tyr	Asn Ala Gln Ser Gln	Gln Tyr Leu Tyr Trp Asp
705	710	715
Gly Glu Arg Arg Thr	Tyr Val Pro Ala Leu	Glu Gln Ser Ala Asp Gly

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              725              730              735
His Lys Glu Thr Gly Ala Pro Ser Lys Glu Gly Lys Glu Lys Lys Glu
              740              745              750
Lys His Lys Thr Lys Thr Ala Gln Gln Ile Ala Lys Asp Met Glu Arg
              755              760              765
Trp Ala Arg Ser Leu Asn Lys Gln Lys Glu Asn Phe Lys Asn Ser Phe
              770              775              780
Gln Pro Ile Ser Ser Leu Arg Asp Asp Glu Arg Arg Glu Ser Ala Thr
785              790              795              800
Ala Asp Ala Gly Tyr Ala Ile Leu Glu Lys Lys Gly Ala Leu Ala Glu
              805              810              815
Arg Gln His Thr Ser Met Asp Leu Pro Lys Leu Ala Ser Asp Asp Arg
              820              825              830
Pro Ser Pro Pro Arg Gly Leu Val Ala Ala Tyr Ser Gly Glu Ser Asp
              835              840              845
Ser Glu Glu Glu Gln Glu Arg Gly Gly Pro Glu Arg Glu Glu Lys Leu
              850              855              860
Thr Asp Trp Gln Lys Leu Ala Cys Leu Leu Cys Arg Arg Gln Phe Pro
865              870              875              880
Ser Lys Glu Ala Leu Ile Arg His Gln Gln Leu Ser Gly Leu His Lys
              885              890              895
Gln Asn Leu Glu Ile His Arg Arg Ala His Leu Ser Glu Asn Glu Leu
              900              905              910
Glu Ala Leu Glu Lys Asn Asp Met Glu Gln Met Lys Tyr Arg Asp Arg
              915              920              925
Ala Ala Glu Arg Arg Glu Lys Tyr Gly Ile Pro Glu Pro Pro Glu Pro
              930              935              940
Lys Arg Arg Lys Tyr Gly Gly Ile Ser Thr Ala Ser Val Asp Phe Glu
945              950              955              960
Gln Pro Thr Arg Asp Gly Leu Gly Ser Asp Asn Ile Gly Ser Arg Met
              965              970              975
Leu Gln Ala Met Gly Trp Lys Glu Gly Ser Gly Leu Gly Arg Lys Lys
              980              985              990
Gln Gly Ile Val Thr Pro Ile Glu Ala Gln Thr Arg Val Arg Gly Ser
              995              1000              1005
Gly Leu Gly Ala Arg Gly Ser Ser Tyr Gly Val Thr Ser Thr Glu Ser
1010              1015              1020
Tyr Lys Glu Thr Leu His Lys Thr Met Val Thr Arg Phe Asn Glu Ala
1025              1030              1035              1040
Gln
1041

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<210> 3235
 <211> 404
 <212> PRT
 <213> Homo sapiens

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    <400> 3235
Pro Ser Phe Leu Asn Thr Gly Leu Gly Pro Thr Ala Leu Gly Val Leu
  1              5              10              15
Gly Gly Ala Gly Ala Gly Leu Met Ser Asn Pro Ser Pro Gln Val Pro
              20              25              30
Glu Glu Glu Ala Ser Thr Ser Val Cys Arg Pro Lys Ser Ser Met Ala
              35              40              45
Ser Thr Ser Arg Arg Gln Arg Glu Arg Arg Phe Arg Arg Tyr Leu
              50              55              60
Ser Ala Gly Arg Leu Val Arg Ala Gln Ala Leu Leu Gln Arg His Pro
              65              70              75              80
Gly Leu Asp Val Asp Ala Gly Gln Pro Pro Pro Leu His Arg Ala Cys
              85              90              95
Ala Arg His Asp Ala Pro Ala Leu Cys Leu Leu Leu Arg Leu Gly Ala

```

100	105	110
Asp Pro Ala His Gln Asp Arg His Gly Asp Thr Ala Leu His Ala Ala		
115	120	125
Ala Arg Gln Gly Pro Asp Ala Tyr Thr Asp Phe Phe Leu Pro Leu Leu		
130	135	140
Ser Arg Cys Pro Ser Ala Met Gly Ile Lys Asn Lys Asp Gly Glu Thr		
145	150	155
Pro Gly Gln Ile Leu Gly Trp Gly Pro Pro Trp Asp Ser Ala Glu Glu		
165	170	175
Glu Glu Glu Asp Asp Ala Ser Lys Glu Arg Glu Trp Arg Gln Lys Leu		
180	185	190
Gln Gly Glu Leu Glu Asp Glu Trp Gln Glu Val Met Gly Arg Phe Glu		
195	200	205
Gly Asp Ala Ser His Glu Thr Gln Glu Pro Glu Ser Phe Ser Ala Trp		
210	215	220
Ser Asp Arg Leu Ala Arg Glu His Ala Gln Lys Cys Gln Gln Gln Gln		
225	230	235
Arg Glu Ala Glu Gly Ser Cys Arg Pro Pro Arg Ala Glu Gly Ser Ser		
245	250	255
Gln Ser Trp Arg Gln Gln Glu Glu Glu Gln Arg Leu Phe Arg Glu Arg		
260	265	270
Ala Arg Ala Lys Glu Glu Glu Leu Arg Glu Ser Arg Ala Arg Arg Ala		
275	280	285
Gln Glu Ala Leu Gly Asp Arg Glu Pro Lys Pro Thr Arg Ala Gly Pro		
290	295	300
Arg Glu Glu His Pro Arg Gly Ala Gly Arg Gly Ser Leu Trp Arg Phe		
305	310	315
Gly Asp Val Pro Trp Pro Cys Pro Gly Gly Gly Asp Pro Glu Ala Met		
325	330	335
Ala Ala Ala Leu Val Ala Arg Gly Pro Pro Leu Glu Glu Gln Gly Ala		
340	345	350
Leu Arg Arg Tyr Leu Arg Val Gln Gln Val Arg Trp His Pro Asp Arg		
355	360	365
Phe Leu Gln Arg Phe Arg Ser Gln Ile Glu Thr Trp Glu Leu Gly Arg		
370	375	380
Val Met Gly Ala Val Thr Ala Leu Ser Gln Ala Leu Asn Arg His Ala		
385	390	395
Glu Ala Leu Lys		400
404		

<210> 3236
 <211> 470
 <212> PRT
 <213> Homo sapiens

<400> 3236

Gly Pro Ala Ser Gly Met Ala Glu Pro Thr Ser Asp Phe Glu Thr Pro	
1	5
Ile Gly Trp His Ala Ser Pro Glu Leu Thr Pro Thr Leu Gly Pro Leu	
20	25
Ser Asp Thr Ala Pro Pro Arg Asp Arg Trp Met Phe Trp Ala Met Leu	
35	40
Pro Pro Pro Pro Pro Pro Leu Thr Ser Ser Leu Pro Ala Ala Gly Ser	
50	55
Lys Pro Ser Ser Glu Ser Gln Pro Pro Met Glu Ala Gln Ser Leu Pro	
65	70
Gly Ala Pro Pro Pro Phe Asp Ala Gln Ile Leu Pro Gly Ala Gln Pro	
85	90
Pro Phe Asp Ala Gln Ser Pro Leu Asp Ser Gln Pro Gln Pro Ser Gly	
100	105
Gln Pro Trp Asn Phe His Ala Ser Thr Ser Trp Tyr Trp Arg Gln Ser	
	110

115	120	125
Ser Asp Arg Phe Pro Arg His Gln Lys Ser Leu Asn Pro Ala Val Lys		
130	135	140
Asn Ser Tyr Tyr Pro Arg Lys Tyr Asp Ala Lys Phe Thr Asp Phe Ser		
145	150	155
Leu Pro Pro Ser Arg Lys Gln Lys Lys Lys Lys Arg Lys Glu Pro Val		160
165	170	175
Phe His Phe Phe Cys Asp Thr Cys Asp Arg Gly Phe Lys Asn Gln Glu		
180	185	190
Lys Tyr Asp Lys His Met Ser Glu His Thr Lys Cys Pro Glu Leu Asp		
195	200	205
Cys Ser Phe Thr Ala His Glu Lys Ile Val Gln Phe His Trp Arg Asn		
210	215	220
Met His Ala Pro Gly Met Lys Lys Ile Lys Leu Asp Thr Pro Glu Glu		240
225	230	235
Ile Ala Arg Trp Arg Glu Glu Arg Arg Lys Asn Tyr Pro Thr Leu Ala		
245	250	255
Asn Ile Glu Arg Lys Lys Lys Leu Lys Leu Glu Lys Glu Lys Arg Gly		
260	265	270
Ala Val Leu Thr Thr Thr Gln Tyr Gly Lys Met Lys Gly Met Ser Arg		
275	280	285
His Ser Gln Met Ala Lys Ile Arg Ser Pro Gly Lys Asn His Lys Trp		
290	295	300
Lys Asn Asp Asn Ser Arg Gln Arg Ala Val Thr Gly Ser Gly Ser His		320
305	310	315
Leu Cys Asp Leu Lys Leu Glu Gly Pro Pro Glu Ala Asn Ala Asp Pro		
325	330	335
Leu Gly Val Leu Ile Asn Ser Asp Ser Glu Ser Asp Lys Glu Glu Lys		
340	345	350
Pro Gln His Ser Val Ile Pro Lys Glu Val Thr Pro Ala Leu Cys Ser		
355	360	365
Leu Met Ser Ser Tyr Gly Ser Leu Ser Gly Ser Glu Ser Glu Pro Glu		
370	375	380
Glu Thr Pro Ile Lys Thr Glu Ala Asp Val Leu Ala Glu Asn Gln Val		400
385	390	395
Leu Asp Ser Ser Ala Pro Lys Ser Pro Ser Gln Asp Val Lys Ala Thr		
405	410	415
Val Arg Asn Phe Ser Glu Ala Lys Ser Glu Asn Arg Lys Lys Ser Phe		
420	425	430
Glu Lys Thr Asn Pro Lys Arg Glu Lys Arg Leu Ser Gln Leu Ser Asn		
435	440	445
Val Ile Arg Thr Lys Asn Thr Pro Ser Ile Ser Leu Gly Asn Ala Ser		
450	455	460
Ser Ser Gly His Ser Thr		
465	470	

<210> 3237

<211> 534

<212> PRT

<213> Homo sapiens

<400> 3237

Phe Val Gly Glu Gln Glu Gly Gly Cys Glu Ala Gly Ala Gly Arg Gly	
1	5
Ala Gln Thr Tyr Pro Gly Glu Ala Gly Glu Arg Trp Phe Gly Arg Arg	10
20	25
Arg Arg Arg Gly Arg Val Val Ser Arg Lys Lys Met Ser Leu Lys Ser	30
35	40
Glu Arg Arg Gly Ile His Val Asp Gln Ser Asp Leu Leu Cys Lys Lys	45
50	55
Gly Cys Gly Tyr Tyr Gly Asn Pro Ala Trp Gln Gly Phe Cys Ser Lys	60

65					70					75				80
Cys	Trp	Arg	Glu	Glu	Tyr	His	Lys	Ala	Arg	Gln	Lys	Gln	Ile	Gln
				85					90					95
Asp	Trp	Glu	Leu	Ala	Glu	Arg	Leu	Gln	Arg	Glu	Glu	Glu	Glu	Ala
			100					105					110	
Ala	Ser	Ser	Gln	Ser	Ser	Gln	Gly	Ala	Gln	Ser	Leu	Thr	Phe	Ser
			115				120					125		
Phe	Glu	Glu	Lys	Lys	Thr	Asn	Glu	Lys	Thr	Arg	Lys	Val	Thr	Thr
	130					135					140			
Lys	Lys	Phe	Phe	Ser	Ala	Ser	Ser	Arg	Val	Gly	Ser	Lys	Lys	Glu
145					150					155				160
Gln	Glu	Ala	Lys	Ala	Pro	Ser	Pro	Ser	Ile	Asn	Arg	Gln	Thr	Ser
				165					170				175	
Glu	Thr	Asp	Arg	Val	Ser	Lys	Glu	Phe	Ile	Glu	Phe	Leu	Lys	Thr
			180					185					190	
His	Lys	Thr	Gly	Gln	Glu	Ile	Tyr	Lys	Gln	Thr	Lys	Leu	Phe	Leu
	195						200					205		
Gly	Met	His	Tyr	Lys	Arg	Asp	Leu	Ser	Ile	Glu	Glu	Gln	Ser	Glu
210						215					220			
Ala	Gln	Asp	Phe	Tyr	His	Asn	Val	Ala	Glu	Arg	Met	Gln	Thr	Arg
225					230					235				240
Lys	Val	Pro	Pro	Glu	Arg	Val	Glu	Lys	Ile	Met	Asp	Gln	Ile	Glu
				245					250					255
Tyr	Ile	Met	Thr	Arg	Leu	Tyr	Lys	Tyr	Val	Phe	Cys	Pro	Glu	Thr
			260					265					270	
Asp	Asp	Glu	Lys	Lys	Asp	Leu	Ala	Ile	Gln	Lys	Arg	Ile	Arg	Ala
		275					280					285		
Arg	Trp	Val	Thr	Pro	Gln	Met	Leu	Cys	Val	Pro	Val	Asn	Glu	Asp
290					295					300				
Pro	Glu	Val	Ser	Asp	Met	Val	Val	Lys	Ala	Ile	Thr	Asp	Ile	Ile
305					310					315				320
Met	Asp	Ser	Lys	Arg	Val	Pro	Arg	Asp	Lys	Leu	Ala	Cys	Ile	Thr
			325					330					335	
Cys	Ser	Lys	His	Ile	Phe	Asn	Ala	Ile	Lys	Ile	Thr	Lys	Asn	Glu
			340					345					350	
Ala	Ser	Ala	Asp	Asp	Phe	Leu	Pro	Thr	Leu	Ile	Tyr	Ile	Val	Leu
		355					360				365			
Gly	Asn	Pro	Pro	Arg	Leu	Gln	Ser	Asn	Ile	Gln	Tyr	Ile	Thr	Arg
370					375					380				
Cys	Asn	Pro	Ser	Arg	Leu	Met	Thr	Gly	Glu	Asp	Gly	Tyr	Tyr	Phe
385					390				395					400
Asn	Leu	Cys	Cys	Ala	Val	Ala	Phe	Ile	Glu	Lys	Leu	Asp	Ala	Gln
			405					410					415	
Leu	Asn	Leu	Ser	Gln	Glu	Asp	Phe	Asp	Arg	Tyr	Met	Ser	Gly	Gln
			420					425					430	
Ser	Pro	Arg	Lys	Gln	Glu	Ala	Glu	Ser	Trp	Ser	Pro	Asp	Ala	Cys
		435					440				445			
Gly	Val	Lys	Gln	Met	Tyr	Lys	Asn	Leu	Asp	Leu	Leu	Ser	Gln	Leu
450					455					460				
Glu	Arg	Gln	Glu	Arg	Ile	Met	Asn	Glu	Ala	Lys	Lys	Leu	Glu	Lys
465					470				475					480
Leu	Ile	Asp	Trp	Thr	Asp	Gly	Ile	Ala	Arg	Glu	Val	Gln	Asp	Ile
				485				490					495	
Glu	Lys	Tyr	Pro	Leu	Glu	Ile	Lys	Pro	Pro	Asn	Gln	Pro	Leu	Ala
			500				505						510	
Ile	Asp	Ser	Glu	Asn	Val	Glu	Asn	Asp	Lys	Leu	Pro	Pro	Pro	Leu
	515						520					525		
Pro	Gln	Val	Tyr	Ala	Gly									
530					534									

<210> 3238

<211> 308

<212> PRT
 <213> Homo sapiens

<400> 3238
 Val Leu Ser Val Cys Pro Thr Gly Val Phe Arg Pro Ala Pro Cys Arg
 1 5 10 15
 Met Ala Phe Met Lys Lys Tyr Leu Leu Pro Ile Leu Gly Leu Phe Met
 20 25 30
 Ala Tyr Tyr Tyr Tyr Ser Ala Asn Glu Glu Phe Arg Pro Glu Met Leu
 35 40 45
 Gln Gly Lys Lys Val Ile Val Thr Gly Ala Ser Lys Gly Ile Gly Arg
 50 55 60
 Glu Met Ala Tyr His Leu Ala Lys Met Gly Ala His Val Val Val Thr
 65 70 75 80
 Ala Arg Ser Lys Glu Thr Leu Gln Lys Val Val Ser His Cys Leu Glu
 85 90 95
 Leu Gly Ala Ala Ser Ala His Tyr Ile Ala Gly Thr Met Glu Asp Met
 100 105 110
 Thr Phe Ala Glu Gln Phe Val Ala Gln Ala Gly Lys Leu Met Gly Gly
 115 120 125
 Leu Asp Met Leu Ile Leu Asn His Ile Thr Asn Thr Ser Leu Asn Leu
 130 135 140
 Phe His Asp Asp Ile His His Val Arg Lys Ser Met Glu Val Asn Phe
 145 150 155 160
 Leu Ser Tyr Val Val Leu Thr Val Ala Ala Leu Pro Met Leu Lys Gln
 165 170 175
 Ser Asn Gly Ser Ile Val Val Val Ser Ser Leu Ala Gly Lys Val Ala
 180 185 190
 Tyr Pro Met Val Ala Ala Tyr Ser Ala Ser Lys Phe Ala Leu Asp Gly
 195 200 205
 Phe Phe Ser Ser Ile Arg Lys Glu Tyr Ser Val Ser Arg Val Asn Val
 210 215 220
 Ser Ile Thr Leu Cys Val Leu Gly Leu Ile Asp Thr Glu Thr Ala Met
 225 230 235 240
 Lys Ala Val Ser Gly Ile Val His Met Gln Ala Ala Pro Lys Glu Glu
 245 250 255
 Cys Ala Leu Glu Ile Ile Lys Gly Gly Ala Leu Arg Gln Glu Glu Val
 260 265 270
 Tyr Tyr Asp Ser Ser Leu Trp Thr Thr Leu Leu Ile Arg Asn Pro Cys
 275 280 285
 Arg Lys Ile Leu Glu Phe Leu Tyr Ser Thr Ser Tyr Asn Met Asp Arg
 290 295 300
 Phe Ile Asn Lys
 305 308

<210> 3239
 <211> 72
 <212> PRT
 <213> Homo sapiens

<221> misc_feature
 <222> (1)...(70)
 <223> Xaa = any amino acid or nothing

<400> 3239
 Glu Arg Thr Met Gln Leu Glu Ile Lys Val Ala Leu Asn Phe Ile Ile
 1 5 10 15
 Phe Tyr Leu Tyr Asn Lys Leu Leu Trp Gln Pro Leu Lys Lys Lys Xaa
 20 25 30
 Glu Ala His Trp Tyr Pro Asp Lys Pro Leu Lys Gly Ser Gly Phe His

```

      35      40      45
Thr Gly Glu Met Val Asp Pro Val Gly Glu Leu Ala Ala Lys Arg Ser
    50      55      60
Gly Leu Thr Val Glu Asp
  65      70

```

```

<210> 3240
<211> 57
<212> PRT
<213> Homo sapiens

```

```

<221> misc_feature
<222> (1)...(57)
<223> Xaa = any amino acid or nothing

```

```

      <400> 3240
His Glu Ser Tyr His Val Asn Pro Asn Leu Cys Asn Pro Val Ala Pro
  1      5      10      15
Thr Ser Gly Ala His Ser Ile Gly Xaa Lys Trp Pro Ser Trp Leu Gly
      20      25      30
Ala Val Ala His Ser Cys Asn Pro Ser Thr Leu Val Gly Arg Gly Gly
      35      40      45
Arg Ile Thr Arg Gly Gln Glu Leu Arg
  50      55      57

```

```

<210> 3241
<211> 128
<212> PRT
<213> Homo sapiens

```

```

      <400> 3241
Pro Ala Gly Ile Gly Arg Ser Thr Ala Lys Thr Pro Gly Thr Pro Gly
  1      5      10      15
Ser Leu Glu Met Glu Asn Leu Lys Ser Gly Val Tyr Pro Leu Lys Glu
      20      25      30
Ala Ser Gly Cys Pro Gly Ala Asp Arg Asn Leu Leu Val Tyr Ser Phe
      35      40      45
Tyr Glu Lys Gly Pro Leu Thr Phe Arg Asp Val Ala Ile Glu Phe Ser
      50      55      60
Leu Glu Glu Trp Gln Cys Leu Asp Thr Ala Gln Gln Asp Leu Tyr Arg
      65      70      75      80
Lys Val Met Leu Glu Asn Tyr Arg Asn Leu Val Phe Leu Ala Gly Ile
      85      90      95
Ala Val Ser Lys Pro Asp Leu Ile Thr Cys Leu Glu Gln Gly Lys Glu
      100      105      110
Pro Trp Asn Met Lys Arg His Ala Met Val Asp Gln Pro Pro Gly Arg
      115      120      125      128

```

```

<210> 3242
<211> 63
<212> PRT
<213> Homo sapiens

```


<400> 3242

```

Pro Leu Pro Ala Arg Gly Lys Ser Thr Leu Pro Ala Thr Phe Cys Ser
 1          5          10          15
Pro Ser Ala Pro Glu Leu Ala Ser Met Ser Val Val Pro Pro Asn Arg
          20          25          30
Ser Gln Thr Gly Trp Pro Arg Gly Val Thr Gln Phe Gly Asn Lys Tyr
          35          40          45
Ile Gln Gln Thr Lys Pro Leu Thr Leu Glu Arg Thr Ile Asn Leu
          50          55          60          63

```

<210> 3243

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3243

```

Phe Val Ala Tyr Leu Lys Leu Pro Phe Phe Ser Gln Val Cys Leu Phe
 1          5          10          15
Ala Ser Ser Glu Met Phe Phe Thr Ile Ser Arg Lys Asn Met Ser Gln
          20          25          30
Lys Leu Ser Leu Leu Leu Leu Val Phe Gly Leu Ile Trp Gly Leu Met
          35          40          45
Leu Leu His Tyr Thr Phe Gln Gln Pro Arg His Gln Ser Ser Val Lys
          50          55          60
Leu Arg Glu Gln Ile Leu Asp Leu Ser Lys Arg Tyr Val Lys Ala Leu
          65          70          75          80
Ala Glu Glu Asn Lys Asn Thr Val Asp Val Glu Asn Gly Ala Ser Met
          85          90          95
Ala Gly Tyr Gly Lys Ile Thr Val Glu Tyr Phe
          100          105          107

```

<210> 3244

<211> 451

<212> PRT

<213> Homo sapiens

<400> 3244

```

Val Leu Met Asp Gly Arg Met Met Arg Ser Met Arg Leu Arg Glu Glu
 1          5          10          15
Glu Ser Pro Gly Pro Ser His Thr Ala Ser Cys Leu Cys Gly Ser Ala
          20          25          30
Pro Cys Ile Leu Cys Ser Cys Cys Pro Ala Ser Arg Asn Ser Thr Val
          35          40          45
Ser Arg Leu Ile Phe Thr Phe Phe Leu Phe Leu Gly Val Leu Val Ser
          50          55          60
Ile Ile Met Leu Ser Pro Gly Val Glu Ser Gln Leu Tyr Lys Leu Pro
          65          70          75          80
Trp Val Cys Glu Glu Gly Ala Gly Ile Pro Thr Val Leu Gln Gly His
          85          90          95
Ile Asp Cys Gly Ser Leu Leu Gly Tyr Arg Ala Val Tyr Arg Met Cys
          100          105          110
Phe Ala Thr Ala Ala Phe Phe Phe Phe Thr Leu Leu Met Leu Cys
          115          120          125
Val Ser Ser Ser Arg Asp Pro Arg Ala Ala Ile Gln Asn Gly Phe Trp
          130          135          140
Phe Phe Lys Phe Leu Ile Leu Val Gly Leu Thr Val Gly Ala Phe Tyr
          145          150          155          160
Ile Pro Asp Gly Ser Phe Thr Asn Ile Trp Phe Tyr Phe Gly Val Val

```

```

      165      170      175
Gly Ser Phe Leu Phe Ile Leu Ile Gln Leu Val Leu Leu Ile Asp Phe
      180      185      190
Ala His Ser Trp Asn Gln Arg Trp Leu Gly Lys Ala Glu Glu Cys Asp
      195      200      205
Ser Arg Ala Trp Tyr Ala Gly Leu Phe Phe Phe Thr Leu Leu Phe Tyr
      210      215      220
Leu Leu Ser Ile Ala Ala Val Ala Leu Met Phe Met Tyr Tyr Thr Glu
      225      230      235      240
Pro Ser Gly Cys His Glu Gly Lys Val Phe Ile Ser Leu Asn Leu Thr
      245      250      255
Phe Cys Val Cys Val Ser Ile Ala Ala Val Leu Pro Lys Val Gln Asp
      260      265      270
Ala Gln Pro Asn Ser Gly Leu Leu Gln Ala Ser Val Ile Thr Leu Tyr
      275      280      285
Thr Met Phe Val Thr Trp Ser Ala Leu Ser Ser Ile Pro Glu Gln Lys
      290      295      300
Cys Asn Pro His Leu Pro Thr Gln Leu Gly Asn Glu Thr Val Val Ala
      305      310      315      320
Gly Pro Glu Gly Tyr Glu Thr Gln Trp Trp Asp Ala Pro Ser Ile Val
      325      330      335
Gly Leu Ile Ile Phe Leu Leu Cys Thr Leu Phe Ile Ser Leu Arg Ser
      340      345      350
Ser Asp His Arg Gln Val Asn Ser Leu Met Gln Thr Glu Glu Cys Pro
      355      360      365
Pro Met Leu Asp Ala Thr Gln Gln Gln Gln Gln Val Ala Ala Cys Glu
      370      375      380
Gly Arg Ala Phe Asp Asn Glu Gln Asp Gly Val Thr Tyr Ser Tyr Ser
      385      390      395      400
Phe Phe His Phe Cys Leu Val Leu Ala Ser Leu His Val Met Met Thr
      405      410      415
Leu Thr Asn Trp Tyr Lys Pro Gly Glu Thr Arg Lys Met Ile Ser Thr
      420      425      430
Trp Thr Ala Val Trp Val Lys Ile Cys Ala Ser Trp Ala Gly Leu Leu
      435      440      445
Leu Tyr Leu
      450 451

```

<210> 3245
 <211> 125
 <212> PRT
 <213> Homo sapiens

```

      <400> 3245
Ser Ser Leu Gly Asn Glu Asp Asp Glu Ile Leu Ser Leu Ala Lys Asp
  1      5      10      15
Ile Thr Gly Met Phe Val Ala Ser His Arg Lys Met Arg Ala His Gln
      20      25      30
Val Leu Thr Phe Leu Leu Leu Phe Val Ile Thr Ser Val Ala Ser Glu
      35      40      45
Asn Ala Ser Thr Ser Arg Gly Cys Gly Leu Asp Leu Leu Pro Gln Tyr
      50      55      60
Val Ser Leu Cys Asp Leu Asp Ala Ile Trp Gly Ile Val Val Glu Ala
      65      70      75      80
Ala Ala Gly Ala Gly Ala Leu Ile Thr Leu Leu Leu Met Leu Ile Leu
      85      90      95
Leu Val Arg Leu Pro Phe Phe Lys Glu Lys Glu Lys Lys Ser Pro Val
      100      105      110
Gly Leu His Phe Leu Phe Leu Leu Gly Thr Leu Gly Pro
      115      120      125

```

<210> 3246
 <211> 170
 <212> PRT
 <213> Homo sapiens

<400> 3246
 His Glu Val Cys Gly Ser Gly Cys Cys Cys His Cys Cys Ala Gly Gly
 1 5 10 15
 Pro Val Ala Arg Gln Lys Ala Leu Pro Arg Leu Arg Gly Val Met Ser
 20 25 30
 Arg Phe Leu Asn Val Leu Arg Ser Trp Leu Val Met Val Ser Ile Ile
 35 40 45
 Ala Met Gly Asn Thr Leu Gln Ser Phe Arg Asp His Thr Phe Leu Tyr
 50 55 60
 Glu Lys Leu Tyr Thr Gly Lys Pro Asn Leu Val Asn Gly Leu Gln Ala
 65 70 75 80
 Arg Thr Phe Gly Ile Trp Thr Leu Leu Ser Ser Val Ile Arg Cys Leu
 85 90 95
 Cys Ala Ile Asp Ile His Asn Lys Thr Leu Tyr His Ile Thr Leu Trp
 100 105 110
 Thr Phe Leu Leu Ala Leu Gly His Phe Leu Ser Glu Leu Phe Val Tyr
 115 120 125
 Gly Thr Ala Ala Pro Thr Ile Gly Val Leu Ala Pro Leu Met Val Ala
 130 135 140
 Ser Phe Ser Ile Leu Gly Met Leu Val Gly Leu Arg Tyr Leu Glu Val
 145 150 155 160
 Glu Pro Val Ser Arg Gln Lys Lys Arg Asn
 165 170

<210> 3247
 <211> 310
 <212> PRT
 <213> Homo sapiens

<400> 3247
 Glu Arg Leu Cys Phe Pro Cys Met Gln Ser Lys Ile Tyr Ser Tyr Met
 1 5 10 15
 Ser Pro Asn Lys Cys Ser Gly Met Arg Phe Pro Leu Gln Glu Glu Asn
 20 25 30
 Ser Val Thr His His Glu Val Lys Cys Gln Gly Lys Pro Leu Ala Gly
 35 40 45
 Ile Tyr Arg Lys Arg Glu Glu Lys Arg Asn Ala Gly Asn Ala Val Arg
 50 55 60
 Ser Ala Met Lys Ser Glu Glu Gln Lys Ile Lys Asp Ala Arg Lys Gly
 65 70 75 80
 Pro Leu Val Pro Phe Pro Asn Gln Lys Ser Glu Ala Ala Glu Pro Pro
 85 90 95
 Lys Thr Pro Pro Ser Ser Cys Asp Ser Thr Asn Ala Ala Ile Ala Lys
 100 105 110
 Gln Ala Leu Lys Lys Pro Ile Lys Gly Lys Gln Ala Pro Arg Lys Lys
 115 120 125
 Ala Gln Gly Lys Thr Gln Gln Asn Arg Lys Leu Thr Asp Phe Tyr Pro
 130 135 140
 Val Arg Arg Ser Ser Arg Lys Ser Lys Ala Glu Leu Gln Ser Glu Glu
 145 150 155 160
 Arg Lys Arg Ile Asp Glu Leu Ile Glu Ser Gly Lys Glu Glu Gly Met
 165 170 175
 Lys Ile Asp Leu Ile Asp Gly Lys Gly Arg Gly Val Ile Ala Thr Lys

```
<210> 3248
<211> 288
<212> PRT
<213> Homo sapiens
```

4949

<210> 3249
 <211> 389
 <212> PRT
 <213> Homo sapiens

<400> 3249
 Thr Arg Val Gly Arg Gly Glu Ser Gly Leu Lys Met Glu Val Lys Pro
 1 5 10 15
 Pro Pro Gly Arg Pro Gln Pro Asp Ser Gly Arg Arg Arg Arg Arg
 20 25 30
 Gly Glu Glu Gly His Asp Pro Lys Glu Pro Glu Gln Leu Arg Lys Leu
 35 40 45
 Phe Ile Gly Gly Leu Ser Phe Gly Thr Thr Asp Asp Ser Leu Arg Glu
 50 55 60
 His Phe Glu Lys Trp Gly Thr Leu Thr Asp Cys Val Val Met Arg Asp
 65 70 75 80
 Pro Gln Thr Lys Arg Ser Arg Gly Phe Gly Phe Val Thr Tyr Ser Cys
 85 90 95
 Val Glu Glu Val Asp Ala Ala Met Cys Ala Arg Pro His Lys Val Asp
 100 105 110
 Gly Arg Val Val Glu Pro Lys Arg Ala Val Ser Arg Glu Asp Ser Val
 115 120 125
 Lys Pro Gly Ala His Leu Thr Val Lys Lys Ile Phe Val Gly Gly Ile
 130 135 140
 Lys Glu Asp Thr Glu Glu Tyr Asn Leu Arg Asp Tyr Phe Glu Lys Tyr
 145 150 155 160
 Gly Lys Ile Glu Thr Ile Glu Val Met Glu Asp Arg Gln Ser Gly Lys
 165 170 175
 Lys Arg Gly Phe Ala Phe Val Thr Phe Asp Asp His Asp Thr Val Asp
 180 185 190
 Lys Ile Val Val Gln Lys Tyr His Thr Ile Asn Gly His Asn Cys Glu
 195 200 205
 Val Lys Lys Ala Leu Ser Lys Gln Glu Met Gln Ser Ala Gly Ser Gln
 210 215 220
 Arg Gly Arg Gly Gly Gly Ser Gly Asn Phe Met Gly Arg Gly Gly Asn
 225 230 235 240
 Phe Gly Gly Gly Gly Gly Asn Phe Gly Arg Gly Gly Asn Phe Gly Gly
 245 250 255
 Arg Gly Gly Tyr Gly Gly Gly Gly Gly Ser Arg Gly Ser Tyr Gly
 260 265 270
 Gly Gly Asp Gly Gly Tyr Asn Gly Phe Gly Gly Asp Gly Gly Asn Tyr
 275 280 285
 Gly Gly Gly Pro Gly Tyr Ser Ser Arg Gly Gly Tyr Gly Gly Gly Gly
 290 295 300
 Pro Gly Tyr Gly Asn Gln Gly Gly Gly Tyr Gly Gly Gly Gly Tyr
 305 310 315 320
 Asp Gly Tyr Asn Glu Gly Gly Asn Phe Gly Gly Asn Tyr Gly Gly
 325 330 335
 Gly Gly Asn Tyr Asn Asp Phe Gly Asn Tyr Ser Gly Gln Gln Gln Ser
 340 345 350
 Asn Tyr Gly Pro Met Lys Gly Gly Ser Phe Gly Gly Arg Ser Ser Gly
 355 360 365
 Ser Pro Tyr Gly Gly Gly Tyr Gly Ser Gly Gly Gly Ser Gly Gly Tyr
 370 375 380
 Gly Ser Arg Arg Phe
 385 389

<210> 3250
 <211> 381
 <212> PRT
 <213> Homo sapiens

<400> 3250
 Val Ala Gly Arg Gly Asp Met Ala Ala Leu Arg Asp Ala Glu Ile Gln
 1 5 10 15
 Lys Asp Val Gln Thr Tyr Tyr Gly Gln Val Leu Lys Arg Ser Ala Asp
 20 25 30
 Leu Gln Thr Asn Gly Cys Val Thr Thr Ala Arg Pro Val Pro Lys His
 35 40 45
 Ile Arg Glu Ala Leu Gln Asn Val His Glu Glu Val Ala Leu Arg Tyr
 50 55 60
 Tyr Gly Cys Gly Leu Val Ile Pro Glu His Leu Glu Asn Cys Trp Ile
 65 70 75 80
 Leu Asp Leu Gly Ser Gly Ser Gly Arg Asp Cys Tyr Val Leu Ser Gln
 85 90 95
 Leu Val Gly Glu Lys Gly His Val Thr Gly Ile Asp Met Thr Lys Gly
 100 105 110
 Gln Val Glu Val Ala Glu Lys Tyr Leu Asp Tyr His Met Glu Lys Tyr
 115 120 125
 Gly Phe Gln Ala Ser Asn Val Thr Phe Ile His Gly Tyr Ile Glu Lys
 130 135 140
 Leu Gly Glu Ala Gly Ile Lys Asn Glu Ser His Asp Ile Val Val Ser
 145 150 155 160
 Asn Cys Val Ile Asn Leu Val Pro Asp Lys Gln Gln Val Leu Gln Glu
 165 170 175
 Ala Tyr Arg Val Leu Lys His Gly Gly Glu Leu Tyr Phe Ser Asp Val
 180 185 190
 Tyr Thr Ser Leu Glu Leu Pro Glu Glu Ile Arg Thr His Lys Val Leu
 195 200 205
 Trp Gly Glu Cys Leu Gly Gly Ala Leu Tyr Trp Lys Glu Leu Ala Val
 210 215 220
 Leu Ala Gln Lys Ile Gly Phe Cys Pro Pro Arg Leu Val Thr Ala Asn
 225 230 235 240
 Leu Ile Thr Ile Gln Asn Lys Glu Leu Glu Arg Val Ile Gly Asp Cys
 245 250 255
 Arg Phe Val Ser Ala Thr Phe Arg Leu Phe Lys His Ser Lys Thr Gly
 260 265 270
 Pro Thr Lys Arg Cys Gln Val Ile Tyr Asn Gly Gly Ile Thr Gly His
 275 280 285
 Glu Lys Glu Leu Met Phe Asp Ala Asn Phe Thr Phe Lys Glu Gly Glu
 290 295 300
 Ile Val Glu Val Asp Glu Glu Thr Ala Ala Ile Leu Lys Asn Ser Arg
 305 310 315 320
 Phe Ala Gln Asp Phe Leu Ile Arg Pro Ile Gly Glu Lys Leu Pro Thr
 325 330 335
 Ser Gly Gly Cys Ser Ala Leu Glu Leu Lys Asp Ile Ile Thr Asp Pro
 340 345 350
 Phe Lys Leu Ala Glu Glu Ser Asp Ser Met Lys Ser Arg Cys Val Pro
 355 360 365
 Asp Ala Ala Gly Gly Cys Cys Gly Thr Lys Lys Ser Cys
 370 375 380 381

<210> 3251
 <211> 381
 <212> PRT
 <213> Homo sapiens

<400> 3251

```

Val Ala Gly Arg Gly Asp Met Ala Ala Leu Arg Asp Ala Glu Ile Gln
 1          5          10          15
Lys Asp Val Gln Thr Tyr Tyr Gly Gln Val Leu Lys Arg Ser Ala Asp
          20          25          30
Leu Gln Thr Asn Gly Cys Val Thr Thr Ala Arg Pro Val Pro Lys His
          35          40          45
Ile Arg Glu Ala Leu Gln Asn Val His Glu Glu Val Ala Leu Arg Tyr
          50          55          60
Tyr Gly Cys Gly Leu Val Ile Pro Glu His Leu Glu Asn Cys Trp Ile
          65          70          75          80
Leu Asp Leu Gly Ser Gly Ser Gly Arg Asp Cys Tyr Val Leu Ser Gln
          85          90          95
Leu Val Gly Glu Lys Gly His Val Thr Gly Ile Asp Met Thr Lys Gly
          100          105          110
Gln Val Glu Val Ala Glu Lys Tyr Leu Asp Tyr His Met Glu Lys Tyr
          115          120          125
Gly Phe Gln Ala Ser Asn Val Thr Phe Ile His Gly Tyr Ile Glu Lys
          130          135          140
Leu Gly Glu Ala Gly Ile Lys Asn Glu Ser His Asp Ile Val Val Ser
          145          150          155          160
Asn Cys Val Ile Asn Leu Val Pro Asp Lys Gln Gln Val Leu Gln Glu
          165          170          175
Ala Tyr Arg Val Leu Lys His Gly Gly Glu Leu Tyr Phe Ser Asp Val
          180          185          190
Tyr Thr Ser Leu Glu Leu Pro Glu Glu Ile Arg Thr His Lys Val Leu
          195          200          205
Trp Gly Glu Cys Leu Gly Gly Ala Leu Tyr Trp Lys Glu Leu Ala Val
          210          215          220
Leu Ala Gln Lys Ile Gly Phe Cys Pro Pro Arg Leu Val Thr Ala Asn
          225          230          235          240
Leu Ile Thr Ile Gln Asn Lys Glu Leu Glu Arg Val Ile Gly Asp Cys
          245          250          255
Arg Phe Val Ser Ala Thr Phe Arg Leu Phe Lys His Ser Lys Thr Gly
          260          265          270
Pro Thr Lys Arg Cys Gln Val Ile Tyr Asn Gly Gly Ile Thr Gly His
          275          280          285
Glu Lys Glu Leu Met Phe Asp Ala Asn Phe Thr Phe Lys Glu Gly Glu
          290          295          300
Ile Val Glu Val Asp Glu Glu Thr Ala Ala Ile Leu Lys Asn Ser Arg
          305          310          315          320
Phe Ala Gln Asp Phe Leu Ile Arg Pro Ile Gly Glu Lys Leu Pro Thr
          325          330          335
Ser Gly Gly Cys Ser Ala Leu Glu Leu Lys Asp Ile Ile Thr Asp Pro
          340          345          350
Phe Lys Leu Ala Glu Glu Ser Asp Ser Met Lys Ser Arg Cys Val Pro
          355          360          365
Asp Ala Ala Gly Gly Cys Cys Gly Thr Lys Lys Ser Cys
          370          375          380          381

```

<210> 3252

<211> 191

<212> PRT

<213> Homo sapiens

<400> 3252

```

Pro Leu Gly Ser Asn Thr Ala Pro Ala Leu Arg Val Met Val Gln Ala
 1          5          10          15
Trp Tyr Met Asp Asp Ala Pro Gly Asp Pro Arg Gln Pro His Arg Pro
          20          25          30
Asp Pro Gly Arg Pro Val Gly Leu Glu Gln Leu Arg Arg Leu Gly Val

```

35	40	45
Leu Tyr Trp Lys	Leu Asp Ala Asp Lys Tyr Glu Asn Asp	Pro Glu Leu
50	55	60
Glu Lys Ile Arg Arg	Glu Arg Asn Tyr Ser Trp Met Asp	Ile Ile Thr
65	70	75
Ile Cys Lys Asp Lys	Leu Pro Asn Tyr Glu Glu Lys Ile	Lys Met Phe
85	90	95
Tyr Glu Glu His	Leu His Leu Asp Asp Glu Ile Arg Tyr	Ile Leu Asp
100	105	110
Gly Ser Gly Tyr Phe	Asp Val Arg Asp Lys Glu Asp Gln Trp	Ile Arg
115	120	125
Ile Phe Met Glu Lys	Gly Asp Met Val Thr Leu Pro Ala Gly	Ile Tyr
130	135	140
His Arg Phe Thr Val	Asp Glu Lys Asn Tyr Thr Lys Ala Met	Arg Leu
145	150	155
Phe Val Gly Glu Pro	Val Trp Thr Ala Tyr Asn Arg Pro	Ala Asp His
165	170	175
Phe Glu Ala Arg Gly	Gln Tyr Val Lys Phe Leu Ala Gln	Thr Ala
180	185	190 191

<210> 3253

<211> 327

<212> PRT

<213> Homo sapiens

<400> 3253

Ala Arg Ala Ala	Ala His Cys Gly Ile Cys Arg Leu Val Arg Trp Trp
1	5 10 15
Arg Lys Arg Arg	Ser Val Met Gly Ile Gln Thr Ser Pro Val Leu Leu
20	25 30
Ala Ser Leu Gly Val	Gly Leu Val Thr Leu Leu Gly Leu Ala Val Gly
35	40 45
Ser Tyr Leu Val Arg	Arg Ser Arg Arg Pro Gln Val Thr Leu Leu Asp
50	55 60
Pro Asn Glu Lys Tyr	Leu Leu Arg Leu Leu Asp Lys Thr Thr Val Ser
65	70 75 80
His Asn Thr Lys Arg	Phe Arg Phe Ala Leu Pro Thr Ala His His Thr
85	90 95
Leu Gly Leu Pro Val	Gly Lys His Ile Tyr Leu Ser Thr Arg Ile Asp
100	105 110
Gly Ser Leu Val Ile	Arg Pro Tyr Thr Pro Val Thr Ser Asp Glu Asp
115	120 125
Gln Gly Tyr Val Asp	Leu Val Ile Lys Val Tyr Leu Lys Gly Val His
130	135 140
Pro Lys Phe Pro Glu	Gly Gly Lys Met Ser Gln Tyr Leu Asp Ser Leu
145	150 155 160
Lys Val Gly Asp Val	Val Glu Phe Arg Gly Pro Ser Gly Leu Leu Thr
165	170 175
Tyr Thr Gly Lys Gly	His Phe Asn Ile Gln Pro Asn Lys Lys Ser Pro
180	185 190
Pro Glu Pro Arg Val	Ala Lys Lys Leu Gly Met Ile Ala Gly Gly Thr
195	200 205
Gly Ile Thr Pro Met	Leu Gln Leu Ile Arg Ala Ile Leu Lys Val Pro
210	215 220
Glu Asp Pro Thr Gln	Cys Phe Leu Leu Phe Ala Asn Gln Thr Glu Lys
225	230 235 240
Asp Ile Ile Leu Arg	Glu Asp Leu Glu Glu Gln Ala Arg Tyr Pro
245	250 255
Asn Arg Phe Lys Leu	Trp Phe Thr Leu Asp His Pro Pro Lys Asp Trp
260	265 270
Ala Tyr Ser Lys Gly	Phe Val Thr Ala Asp Met Ile Arg Glu His Leu

275	280	285
Pro Ala Pro Gly Asp Asp Val Leu Val Leu Leu Cys Gly Pro Pro Pro		
290	295	300
Met Val Gln Leu Ala Cys His Pro Asn Leu Asp Lys Leu Gly Tyr Ser		
305	310	315
Gln Lys Met Arg Phe Thr Tyr		
325	327	

<210> 3254
 <211> 322
 <212> PRT
 <213> Homo sapiens

<400> 3254

Leu Gln Ser Ala Gly Glu Gly Val Thr His Val Leu Ile Leu Leu Glu		
1	5	10
Ser Pro Ala Arg Pro Val Ala Ala Val Thr Gln Val Gln Arg Arg Arg		
	20	25
Tyr His Arg Leu Ser Asp Met Ser Met Leu Ala Glu Arg Arg Arg Lys		
	35	40
Gln Lys Trp Ala Val Asp Pro Gln Asn Thr Ala Trp Ser Asn Asp Asp		
	50	55
Ser Lys Phe Gly Gln Arg Met Leu Glu Lys Met Gly Trp Ser Lys Gly		
	65	70
Lys Gly Leu Gly Ala Gln Glu Gln Gly Ala Thr Asp His Ile Lys Val		
	85	90
Gln Val Lys Asn Asn His Leu Gly Leu Gly Ala Thr Ile Asn Asn Glu		
	100	105
Asp Asn Trp Ile Ala His Gln Asp Asp Phe Asn Gln Leu Leu Ala Glu		
	115	120
Leu Asn Thr Cys His Gly Gln Glu Thr Thr Asp Ser Ser Asp Lys Lys		
	130	135
Glu Lys Lys Ser Phe Ser Leu Glu Glu Lys Ser Lys Ile Ser Lys Asn		
	145	150
Arg Val His Tyr Met Lys Phe Thr Lys Gly Lys Asp Leu Ser Ser Arg		
	165	170
Ser Lys Thr Asp Leu Asp Cys Ile Phe Gly Lys Arg Gln Ser Lys Lys		
	180	185
Thr Pro Glu Gly Asp Ala Ser Pro Ser Thr Pro Glu Glu Asn Glu Thr		
	195	200
Thr Thr Thr Ser Ala Phe Thr Ile Gln Glu Tyr Phe Ala Lys Arg Met		
	210	215
Ala Ala Leu Lys Asn Lys Pro Gln Val Pro Val Pro Gly Ser Asp Ile		
	225	230
Ser Glu Thr Gln Val Glu Arg Lys Arg Gly Lys Lys Arg Asn Lys Glu		
	245	250
Ala Thr Gly Lys Asp Val Glu Ser Tyr Leu Gln Pro Lys Ala Lys Arg		
	260	265
His Thr Glu Gly Lys Pro Glu Arg Ala Glu Ala Gln Glu Arg Val Ala		
	275	280
Lys Lys Lys Ser Ala Pro Ala Glu Glu Gln Leu Arg Gly Pro Cys Trp		
	290	295
Asp Gln Ser Ser Lys Ala Ser Ala Gln Asp Ala Gly Asp His Val Gln		
	305	310
Pro Ala		
	322	

<210> 3255
 <211> 88

<212> PRT

<213> Homo sapiens

<400> 3255

```

Gly Ser Ala Ala Met Lys Val Lys Ile Lys Cys Trp Asn Gly Val Ala
 1             5             10             15
Thr Trp Leu Trp Val Ala Asn Asp Glu Asn Cys Gly Ile Cys Arg Met
      20             25             30
Ala Phe Asn Gly Cys Cys Pro Asp Cys Lys Val Pro Gly Asp Asp Cys
      35             40             45
Pro Leu Val Trp Gly Gln Cys Ser His Cys Phe His Met His Cys Ile
      50             55             60
Leu Lys Trp Leu His Ala Gln Gln Val Gln Gln His Cys Pro Met Cys
      65             70             75             80
Arg Gln Glu Trp Lys Phe Lys Glu
              85             88

```

<210> 3256

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3256

```

Thr Ala Ala Arg Arg Arg Gln Lys Gly Thr Ala Ala Arg Arg Arg Gln
 1             5             10             15
Lys Gly Thr Leu Glu Glu Val Val Leu Pro Pro Arg Ser Cys Arg Val
      20             25             30
Phe Trp Ile His Ser Gly Thr Thr Met Ser Lys Val Ser Phe Lys Ile
      35             40             45
Thr Leu Thr Ser Asp Pro Arg Leu Pro Tyr Lys Val Leu Ser Val Pro
      50             55             60
Glu Ser Thr Pro Phe Thr Ala Val Leu Lys Phe Ala Ala Glu Glu Phe
      65             70             75             80
Lys Val Pro Ala Ala Thr Ser Ala Ile Ile Thr Asn Asp Gly Ile Gly
              85             90             95
Ile Asn Pro Ala Gln Thr Ala Gly Asn Val Phe Leu Lys His Gly Ser
      100             105             110
Glu Leu Arg Ile Ile Pro Arg Asp Arg Val Gly Ser Cys
      115             120             125

```

<210> 3257

<211> 483

<212> PRT

<213> Homo sapiens

<400> 3257

```

Gly Cys Ser Ala Ala Ala Ala Gly Ala Gly Ser Gly Pro Trp Ala Ala
 1             5             10             15
Gln Glu Lys Gln Phe Pro Pro Ala Leu Leu Ser Phe Phe Ile Tyr Asn
      20             25             30
Pro Arg Phe Gly Pro Arg Glu Gly Gln Glu Glu Asn Lys Ile Leu Phe
      35             40             45
Tyr His Pro Asn Glu Val Glu Lys Asn Glu Lys Ile Arg Asn Val Gly
      50             55             60
Leu Cys Glu Ala Ile Val Gln Phe Thr Arg Thr Phe Ser Pro Ser Lys
      65             70             75             80
Pro Ala Lys Ser Leu His Thr Gln Lys Asn Arg Gln Phe Phe Asn Glu

```

85										90					95				
Pro	Glu	Glu	Asn	Phe	Trp	Met	Val	Met	Val	Val	Arg	Asn	Pro	Ile	Ile				
			100						105				110						
Glu	Lys	Gln	Ser	Lys	Asp	Gly	Lys	Pro	Val	Ile	Glu	Tyr	Gln	Glu	Glu				
		115					120					125							
Glu	Leu	Leu	Asp	Lys	Val	Tyr	Ser	Ser	Val	Leu	Arg	Gln	Cys	Tyr	Ser				
	130					135					140								
Met	Tyr	Lys	Leu	Phe	Asn	Gly	Thr	Phe	Leu	Lys	Ala	Met	Glu	Asp	Gly				
	145				150						155				160				
Gly	Val	Lys	Leu	Leu	Lys	Glu	Arg	Leu	Glu	Lys	Phe	Phe	His	Arg	Tyr				
			165						170					175					
Leu	Gln	Thr	Leu	His	Leu	Gln	Ser	Cys	Asp	Leu	Leu	Asp	Ile	Phe	Gly				
		180					185						190						
Gly	Ile	Ser	Phe	Phe	Pro	Leu	Asp	Lys	Met	Thr	Tyr	Leu	Lys	Ile	Gln				
	195					200						205							
Ser	Phe	Ile	Asn	Arg	Met	Glu	Ser	Leu	Asn	Ile	Val	Lys	Tyr	Thr					
	210				215						220								
Ala	Phe	Leu	Tyr	Asn	Asp	Gln	Leu	Ile	Trp	Ser	Gly	Leu	Glu	Gln	Asp				
	225				230					235				240					
Asp	Met	Arg	Ile	Leu	Tyr	Lys	Tyr	Leu	Thr	Thr	Ser	Leu	Phe	Pro	Arg				
			245						250					255					
His	Ile	Glu	Pro	Glu	Leu	Ala	Gly	Arg	Asp	Ser	Pro	Ile	Arg	Ala	Glu				
		260					265						270						
Met	Pro	Gly	Asn	Leu	Gln	His	Tyr	Gly	Arg	Phe	Leu	Thr	Gly	Pro	Leu				
	275				280							285							
Asn	Leu	Asn	Asp	Pro	Asp	Ala	Lys	Cys	Arg	Phe	Pro	Lys	Ile	Phe	Val				
	290				295						300								
Asn	Thr	Asp	Asp	Thr	Tyr	Glu	Glu	Leu	His	Leu	Ile	Val	Tyr	Lys	Ala				
	305				310					315				320					
Met	Ser	Ala	Ala	Val	Cys	Phe	Met	Ile	Asp	Ala	Ser	Val	His	Pro	Thr				
			325						330					335					
Leu	Asp	Phe	Cys	Arg	Arg	Leu	Asp	Ser	Ile	Val	Gly	Pro	Gln	Leu	Thr				
		340					345					350							
Val	Leu	Ala	Ser	Asp	Ile	Cys	Glu	Gln	Phe	Asn	Ile	Asn	Lys	Arg	Met				
	355					360					365								
Ser	Gly	Ser	Glu	Lys	Glu	Pro	Gln	Phe	Lys	Phe	Ile	Tyr	Phe	Asn	His				
	370				375						380								
Met	Asn	Leu	Ala	Glu	Lys	Ser	Thr	Val	His	Met	Arg	Lys	Thr	Pro	Ser				
	385				390					395				400					
Val	Ser	Leu	Thr	Ser	Val	His	Pro	Asp	Leu	Met	Lys	Ile	Leu	Gly	Asp				
			405						410					415					
Ile	Asn	Ser	Asp	Phe	Thr	Arg	Val	Asp	Glu	Asp	Glu	Glu	Ile	Ile	Val				
		420						425					430						
Lys	Ala	Met	Ser	Asp	Tyr	Trp	Val	Val	Gly	Lys	Lys	Ser	Asp	Arg	Arg				
	435					440						445							
Glu	Leu	Tyr	Val	Ile	Leu	Asn	Gln	Lys	Asn	Ala	Asn	Leu	Ile	Glu	Val				
	450				455						460								
Asn	Glu	Glu	Val	Lys	Lys	Leu	Cys	Ala	Thr	Gln	Phe	Asn	Asn	Ile	Phe				
	465				470					475				480					
Phe	Leu	Asp																	
		483																	

<210> 3258

<211> 481

<212> PRT

<213> Homo sapiens

<400> 3258

Ala	Pro	Arg	Gly	Cys	Ser	Met	Pro	His	Arg	Lys	Lys	Lys	Pro	Phe	Ile				
1				5					10				15						
Glu	Lys	Lys	Lys	Ala	Val	Ser	Phe	His	Leu	Val	His	Arg	Ser	Gln	Arg				

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<210> 3259
<211> 320
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<212> PRT

<213> Homo sapiens

<400> 3259

Gln Met Glu Pro Gly Asn Asp Thr Gln Ile Ser Glu Phe Leu Leu Leu
 1 5 10 15
 Gly Phe Ser Gln Glu Pro Gly Leu Gln Pro Phe Leu Phe Gly Leu Phe
 20 25 30
 Leu Ser Met Tyr Leu Val Thr Val Leu Gly Asn Leu Leu Ile Ile Leu
 35 40 45
 Ala Thr Ile Ser Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu
 50 55 60
 Ser Asn Leu Ser Phe Ala Asp Ile Cys Val Thr Ser Thr Thr Ile Pro
 65 70 75 80
 Lys Met Leu Met Asn Ile Gln Thr Gln Asn Lys Val Ile Thr Tyr Ile
 85 90 95
 Ala Cys Leu Met Gln Met Tyr Phe Phe Ile Leu Phe Ala Gly Phe Glu
 100 105 110
 Asn Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys
 115 120 125
 His Pro Leu His Tyr Met Val Ile Met Asn Pro His Leu Cys Gly Leu
 130 135 140
 Leu Val Leu Ala Ser Trp Thr Met Ser Ala Leu Tyr Ser Leu Leu Gln
 145 150 155 160
 Ile Leu Met Val Val Arg Leu Ser Phe Cys Thr Ala Leu Glu Ile Pro
 165 170 175
 His Phe Phe Cys Glu Leu Asn Gln Val Ile Gln Leu Ala Cys Ser Asp
 180 185 190
 Ser Phe Leu Asn His Met Val Ile Tyr Phe Thr Val Ala Leu Leu Gly
 195 200 205
 Gly Gly Pro Leu Thr Gly Ile Leu Tyr Ser Tyr Ser Lys Ile Ile Ser
 210 215 220
 Ser Ile His Ala Ile Ser Ser Ala Gln Gly Lys Tyr Lys Ala Phe Ser
 225 230 235 240
 Thr Cys Ala Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Ala Ile
 245 250 255
 Leu Gly Val Tyr Leu Ser Ser Ala Ala Thr Arg Asn Ser His Ser Ser
 260 265 270
 Ala Thr Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro
 275 280 285
 Phe Ile Tyr Ser Leu Arg Asn Lys Asp Ile Lys Arg Ala Leu Gly Ile
 290 295 300
 His Leu Leu Trp Gly Thr Met Lys Gly Gln Phe Phe Lys Lys Cys Pro
 305 310 315 320

<210> 3260

<211> 846

<212> PRT

<213> Homo sapiens

<400> 3260

Ile Pro Phe Leu Lys Ser Cys Cys Cys Cys Cys Leu Phe Asp Phe Pro
 1 5 10 15
 Pro Pro Pro Leu Asp Gln Val Gln Glu Glu Cys Glu Val Glu Arg
 20 25 30
 Val Thr Glu His Gly Thr Pro Lys Pro Phe Arg Lys Phe Asp Ser Val
 35 40 45
 Ala Phe Gly Glu Ser Gln Ser Glu Asp Glu Gln Phe Glu Asn Asp Leu

50	55	60
Glu Thr Asp Pro Pro Asn Trp Gln Gln Leu Val Ser Arg Glu Val Leu		
65	70	75
Leu Gly Leu Lys Pro Cys Glu Ile Lys Arg Gln Glu Val Ile Asn Glu		80
	85	90
Leu Phe Tyr Thr Glu Arg Ala His Val Arg Thr Leu Lys Val Leu Asp		95
	100	105
Gln Val Phe Tyr Gln Arg Val Ser Arg Glu Gly Ile Leu Ser Pro Ser		110
	115	120
Glu Leu Arg Lys Ile Phe Ser Asn Leu Glu Asp Ile Leu Gln Leu His		125
	130	135
Ile Gly Leu Asn Glu Gln Met Lys Ala Val Arg Lys Arg Asn Glu Thr		140
145	150	155
Ser Val Ile Asp Gln Ile Gly Glu Asp Leu Leu Thr Trp Phe Ser Gly		160
	165	170
Pro Gly Glu Glu Lys Leu Lys His Ala Ala Ala Thr Phe Cys Ser Asn		175
	180	185
Gln Pro Phe Ala Leu Glu Met Ile Lys Ser Arg Gln Lys Lys Asp Ser		190
	195	200
Arg Phe Gln Thr Phe Val Gln Asp Ala Glu Ser Asn Pro Leu Cys Arg		205
	210	215
Arg Leu Gln Leu Lys Asp Ile Ile Pro Thr Gln Met Gln Arg Leu Thr		220
225	230	235
Lys Tyr Pro Leu Leu Asp Asn Ile Ala Thr Tyr Thr Glu Trp Pro		240
	245	250
Thr Glu Arg Glu Lys Val Lys Lys Ala Ala Asp His Cys Arg Gln Ile		255
	260	265
Leu Asn Tyr Val Asn Gln Ala Val Lys Glu Ala Glu Asn Lys Gln Arg		270
	275	280
Leu Glu Asp Tyr Gln Arg Arg Leu Asp Thr Ser Ser Leu Lys Leu Ser		285
	290	295
Glu Tyr Pro Asn Val Glu Glu Leu Arg Asn Leu Asp Leu Thr Lys Arg		300
305	310	315
Lys Met Ile His Glu Gly Pro Leu Val Trp Lys Val Asn Arg Asp Lys		320
	325	330
Thr Ile Asp Leu Tyr Thr Leu Leu Leu Glu Asp Ile Leu Val Leu Leu		335
	340	345
Gln Lys Gln Asp Asp Arg Leu Val Leu Arg Cys His Ser Lys Ile Leu		350
	355	360
Ala Ser Thr Ala Asp Ser Lys His Thr Phe Ser Pro Val Ile Lys Leu		365
	370	375
Ser Thr Val Leu Val Arg Gln Val Ala Thr Asp Asn Lys Ala Leu Phe		380
385	390	395
Val Ile Ser Met Ser Asp Asn Gly Ala Gln Ile Tyr Glu Leu Val Ala		400
	405	410
Gln Thr Val Ser Glu Lys Thr Val Trp Gln Asp Leu Ile Cys Arg Met		415
	420	425
Ala Ala Ser Val Lys Glu Gln Ser Thr Lys Pro Ile Pro Leu Pro Gln		430
	435	440
Ser Thr Pro Gly Glu Gly Asp Asn Asp Glu Glu Asp Pro Ser Lys Leu		445
	450	455
Lys Glu Glu Gln His Gly Ile Ser Val Thr Gly Leu Gln Ser Pro Asp		460
465	470	475
Arg Asp Leu Gly Leu Glu Ser Thr Leu Ile Ser Ser Lys Pro Gln Ser		480
	485	490
His Ser Leu Ser Thr Ser Gly Lys Ser Glu Val Arg Asp Leu Phe Val		495
	500	505
Ala Glu Arg Gln Phe Ala Lys Glu Gln His Thr Asp Gly Thr Leu Lys		510
	515	520
Glu Val Gly Glu Asp Tyr Gln Ile Ala Ile Pro Asp Ser His Leu Pro		525
	530	535
Val Ser Glu Glu Arg Trp Ala Leu Asp Ala Leu Arg Asn Leu Gly Leu		540
545	550	555
Leu Lys Gln Leu Leu Val Gln Gln Leu Gly Leu Thr Glu Lys Ser Val		560

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<210> 3261
<211> 700
<212> PRT
<213> Homo sapiens
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4960

145					150					155				160
Val	Leu	Val	Thr	Val	Leu	Val	Gln	Ser	Ser	Ser	Thr	Ser	Thr	Ser
				165						170				175
Val	Val	Ser	Met	Val	Ser	Ser	Ser	Leu	Leu	Thr	Val	Arg	Ala	Ala
				180						185				190
Pro	Ile	Ile	Met	Gly	Ala	Asn	Ile	Gly	Thr	Ser	Ile	Thr	Asn	Thr
				195						200				205
Val	Ala	Leu	Met	Gln	Val	Gly	Asp	Arg	Ser	Glu	Phe	Arg	Arg	Ala
				210						215				220
Ala	Gly	Ala	Thr	Val	His	Asp	Phe	Phe	Asn	Trp	Leu	Ser	Val	Leu
				225						230				235
Leu	Leu	Pro	Val	Glu	Val	Ala	Thr	His	Tyr	Leu	Glu	Ile	Ile	Thr
				245						250				255
Leu	Ile	Val	Glu	Ser	Phe	His	Phe	Lys	Asn	Gly	Glu	Asp	Ala	Pro
				260						265				270
Leu	Leu	Lys	Val	Ile	Thr	Lys	Pro	Phe	Thr	Lys	Leu	Ile	Val	Gln
				275						280				285
Asp	Lys	Lys	Val	Ile	Ser	Gln	Ile	Ala	Met	Asn	Asp	Glu	Lys	Ala
				290						295				300
Asn	Lys	Ser	Leu	Val	Lys	Ile	Trp	Cys	Lys	Thr	Phe	Thr	Asn	Lys
				305						310				315
Gln	Ile	Asn	Val	Thr	Val	Pro	Ser	Thr	Ala	Asn	Cys	Thr	Ser	Pro
				325						330				335
Leu	Cys	Trp	Thr	Asp	Gly	Ile	Gln	Asn	Trp	Thr	Met	Lys	Asn	Val
				340						345				350
Tyr	Lys	Glu	Asn	Ile	Ala	Lys	Cys	Gln	His	Ile	Phe	Val	Asn	Phe
				355						360				365
Leu	Pro	Asp	Leu	Ala	Val	Gly	Thr	Ile	Leu	Leu	Ile	Leu	Ser	Leu
				370						375				380
Val	Leu	Cys	Gly	Cys	Leu	Ile	Met	Ile	Val	Lys	Ile	Leu	Gly	Ser
				385						390				395
Leu	Lys	Gly	Gln	Val	Ala	Thr	Val	Ile	Lys	Lys	Thr	Ile	Asn	Thr
				405						410				415
Phe	Pro	Phe	Pro	Phe	Ala	Trp	Leu	Thr	Gly	Tyr	Leu	Ala	Ile	Leu
				420						425				430
Gly	Ala	Gly	Met	Thr	Phe	Ile	Val	Gln	Ser	Ser	Ser	Val	Phe	Thr
				435						440				445
Ala	Leu	Thr	Pro	Leu	Ile	Gly	Ile	Gly	Val	Ile	Thr	Ile	Glu	Arg
				450						455				460
Tyr	Pro	Leu	Thr	Leu	Gly	Ser	Asn	Ile	Gly	Thr	Thr	Thr	Thr	Ala
				465						470				475
Leu	Ala	Ala	Leu	Ala	Ser	Pro	Gly	Asn	Ala	Leu	Arg	Ser	Ser	Leu
				485						490				495
Ile	Ala	Leu	Cys	His	Phe	Phe	Phe	Asn	Ile	Ser	Gly	Ile	Leu	Leu
				500						505				510
Tyr	Pro	Ile	Pro	Phe	Thr	Arg	Leu	Pro	Ile	Arg	Met	Ala	Lys	Gly
				515						520				525
Gly	Asn	Ile	Ser	Ala	Lys	Tyr	Arg	Trp	Phe	Ala	Val	Phe	Tyr	Leu
				530						535				540
Ile	Phe	Phe	Phe	Leu	Ile	Pro	Leu	Thr	Val	Phe	Gly	Leu	Ser	Leu
				545						550				555
Gly	Trp	Arg	Val	Leu	Val	Gly	Val	Gly	Val	Pro	Val	Val	Phe	Ile
				565						570				575
Ile	Leu	Val	Leu	Cys	Leu	Arg	Leu	Leu	Gln	Ser	Arg	Cys	Pro	Arg
				580						585				590
Leu	Pro	Lys	Lys	Leu	Gln	Asn	Trp	Asn	Phe	Leu	Pro	Leu	Trp	Met
				595						600				605
Ser	Leu	Lys	Pro	Trp	Asp	Ala	Val	Val	Ser	Lys	Phe	Thr	Gly	Cys
				610						615				620
Gln	Met	Arg	Cys	Cys	Cys	Cys	Cys	Arg	Val	Cys	Cys	Arg	Ala	Cys
				625						630				635
Leu	Leu	Cys	Gly	Cys	Pro	Lys	Cys	Cys	Arg	Cys	Ser	Lys	Cys	Cys
				645						650				655
Asp	Leu	Glu	Glu	Ala	Gln	Glu	Gly	Gln	Asp	Val	Pro	Val	Lys	Ala
														Pro


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<210> 3262
<211> 448
<212> PRT
<213> Homo sapiens
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4962

385					390					395				400
Thr	Gln	His	Ser	Ile	Ile	Ile	Thr	Lys	Gly	Asp	Ser	Gln	Pro	Ala
				405					410					415
Ala	Ala	Pro	His	Pro	Glu	Pro	Ser	Leu	Ser	Phe	Gln	Ala	His	Leu
			420					425					430	
Leu	Pro	Asn	Thr	Ser	Pro	Ile	Ser	Pro	Thr	Gln	Pro	Leu	Thr	Pro
		435					440					445		448

<210> 3263
 <211> 306
 <212> PRT
 <213> Homo sapiens

<400> 3263

Gln	Ala	Arg	Ser	Pro	Ser	Val	Ala	Ala	Met	Ala	Ser	Pro	Gln	Leu	Cys
1				5					10					15	
Arg	Ala	Leu	Val	Ser	Ala	Gln	Trp	Val	Ala	Glu	Ala	Leu	Arg	Ala	Pro
			20					25					30		
Arg	Ala	Gly	Gln	Pro	Leu	Gln	Leu	Leu	Asp	Ala	Ser	Trp	Tyr	Leu	Pro
		35					40					45			
Lys	Leu	Gly	Arg	Asp	Ala	Arg	Arg	Glu	Phe	Glu	Glu	Arg	His	Ile	Pro
	50					55					60				
Gly	Ala	Ala	Phe	Phe	Asp	Ile	Asp	Gln	Cys	Ser	Asp	Arg	Thr	Ser	Pro
65					70				75					80	
Tyr	Asp	His	Met	Leu	Pro	Gly	Ala	Glu	His	Phe	Ala	Glu	Tyr	Ala	Gly
			85						90					95	
Arg	Leu	Gly	Val	Gly	Ala	Ala	Thr	His	Val	Val	Ile	Tyr	Asp	Ala	Ser
			100					105					110		
Asp	Gln	Gly	Leu	Tyr	Ser	Ala	Pro	Arg	Val	Trp	Trp	Met	Phe	Arg	Ala
		115					120					125			
Phe	Gly	His	His	Ala	Val	Ser	Leu	Leu	Asp	Gly	Gly	Leu	Arg	His	Trp
	130					135					140				
Leu	Arg	Gln	Asn	Leu	Pro	Leu	Ser	Ser	Gly	Lys	Ser	Gln	Pro	Ala	Pro
145					150					155				160	
Ala	Glu	Phe	Arg	Ala	Gln	Leu	Asp	Pro	Ala	Phe	Ile	Lys	Thr	Tyr	Glu
			165						170					175	
Asp	Ile	Lys	Glu	Asn	Leu	Glu	Ser	Arg	Arg	Phe	Gln	Val	Val	Asp	Ser
		180						185					190		
Arg	Ala	Thr	Gly	Arg	Phe	Arg	Gly	Thr	Glu	Pro	Glu	Pro	Arg	Asp	Gly
		195					200					205			
Ile	Glu	Pro	Gly	His	Ile	Pro	Gly	Thr	Val	Asn	Ile	Pro	Phe	Thr	Asp
	210					215						220			
Phe	Leu	Ser	Gln	Glu	Gly	Leu	Glu	Lys	Ser	Pro	Glu	Glu	Ile	Arg	His
225					230					235				240	
Leu	Phe	Gln	Glu	Lys	Lys	Val	Asp	Leu	Ser	Lys	Pro	Leu	Val	Ala	Thr
			245						250					255	
Cys	Gly	Ser	Gly	Val	Thr	Ala	Cys	His	Val	Ala	Leu	Gly	Ala	Tyr	Leu
		260						265					270		
Cys	Gly	Lys	Pro	Asp	Val	Pro	Ile	Tyr	Asp	Gly	Ser	Trp	Val	Glu	Trp
	275						280					285			
Tyr	Met	Arg	Ala	Arg	Pro	Glu	Asp	Val	Ile	Ser	Glu	Gly	Arg	Gly	Lys
	290					295					300				
Thr	His														
305	306														

<210> 3264
 <211> 466

<212> PRT

<213> Homo sapiens

<400> 3264

Ala Arg Arg Ser Thr Pro Arg Thr Ala Pro Arg Ala Ser Ala Thr Arg
 1 5 10 15
 Ser Ala Ala Gly Thr Met Arg Glu Ile Val His Ile Gln Ala Gly Gln
 20 25 30
 Cys Gly Asn Gln Ile Gly Ala Lys Phe Trp Glu Val Ile Ser Asp Glu
 35 40 45
 His Gly Ile Asp Pro Thr Gly Ser Tyr His Gly Asp Ser Asp Leu Gln
 50 55 60
 Leu Glu Arg Ile Asn Val Tyr Tyr Asn Glu Ala Ala Gly Asn Lys Tyr
 65 70 75 80
 Val Pro Arg Ala Ile Leu Val Asp Leu Glu Pro Gly Thr Met Asp Ser
 85 90 95
 Val Arg Ser Gly Pro Phe Gly Gln Ile Phe Arg Pro Asp Asn Phe Val
 100 105 110
 Phe Gly Gln Ser Gly Ala Gly Asn Asn Trp Ala Lys Gly His Tyr Thr
 115 120 125
 Glu Gly Ala Glu Leu Val Asp Ser Val Leu Asp Val Val Arg Lys Glu
 130 135 140
 Ser Glu Ser Cys Asp Cys Leu Gln Gly Phe Gln Leu Thr His Ser Leu
 145 150 155 160
 Gly Gly Gly Thr Gly Ser Gly Met Gly Thr Leu Leu Ile Ser Lys Ile
 165 170 175
 Arg Glu Glu Tyr Pro Asp Arg Ile Met Asn Thr Phe Ser Val Met Pro
 180 185 190
 Ser Pro Lys Val Ser Asp Thr Val Val Glu Pro Tyr Asn Ala Thr Leu
 195 200 205
 Ser Val His Gln Leu Val Glu Asn Thr Asp Glu Thr Tyr Ser Ile Asp
 210 215 220
 Asn Glu Ala Leu Tyr Asp Ile Cys Phe Arg Thr Leu Lys Leu Thr Thr
 225 230 235 240
 Pro Thr Tyr Gly Asp Leu Asn His Leu Val Ser Ala Thr Met Ser Gly
 245 250 255
 Val Thr Thr Cys Leu Arg Phe Pro Gly Gln Leu Asn Ala Asp Leu Arg
 260 265 270
 Lys Leu Ala Val Asn Met Val Pro Phe Pro Arg Leu His Phe Phe Met
 275 280 285
 Pro Gly Phe Ala Pro Leu Thr Ser Arg Gly Ser Gln Gln Tyr Arg Ala
 290 295 300
 Leu Thr Val Pro Glu Leu Thr Gln Gln Met Phe Asp Ser Lys Asn Met
 305 310 315 320
 Met Ala Ala Cys Asp Pro Arg His Gly Arg Tyr Leu Thr Val Ala Ala
 325 330 335
 Ile Phe Arg Gly Arg Met Ser Met Lys Glu Val Asp Glu Gln Met Leu
 340 345 350
 Asn Val Gln Asn Lys Asn Ser Ser Tyr Phe Val Glu Trp Ile Pro Asn
 355 360 365
 Asn Val Lys Thr Ala Val Cys Asp Ile Pro Pro Arg Gly Leu Lys Met
 370 375 380
 Ser Ala Thr Phe Ile Gly Asn Ser Thr Ala Ile Gln Glu Leu Phe Lys
 385 390 395 400
 Arg Ile Ser Glu Gln Phe Thr Ala Met Phe Arg Arg Lys Ala Phe Leu
 405 410 415
 His Trp Tyr Thr Gly Glu Gly Met Asp Glu Met Glu Phe Thr Glu Ala
 420 425 430
 Glu Ser Asn Met Asn Asp Leu Val Ser Glu Tyr Gln Gln Tyr Gln Asp
 435 440 445
 Ala Thr Ala Asp Glu Gln Gly Glu Phe Glu Glu Glu Glu Gly Glu Asp
 450 455 460
 Glu Ala

465 466

<210> 3265
 <211> 199
 <212> PRT
 <213> Homo sapiens

<400> 3265
 Trp Trp Glu Asp Ala Arg Val Leu Gly Pro Phe His Pro Glu Glu Glu
 1 5 10 15
 Gly His Trp Val Met Thr Pro Ser Glu Gly Ala Arg Ala Gly Thr Gly
 20 25 30
 Arg Glu Leu Glu Met Leu Asp Ser Leu Leu Ala Leu Gly Gly Leu Val
 35 40 45
 Leu Leu Arg Asp Ser Val Glu Trp Glu Gly Arg Ser Leu Leu Lys Ala
 50 55 60
 Leu Val Lys Lys Ser Ala Leu Cys Gly Glu Gln Val His Ile Leu Gly
 65 70 75 80
 Cys Glu Val Ser Glu Glu Glu Phe Arg Glu Gly Phe Asp Ser Asp Ile
 85 90 95
 Asn Asn Arg Leu Val Tyr His Asp Phe Phe Arg Asp Pro Leu Asn Trp
 100 105 110
 Ser Lys Thr Glu Glu Ala Phe Pro Gly Gly Pro Leu Gly Ala Leu Arg
 115 120 125
 Ala Met Cys Lys Arg Thr Asp Pro Val Pro Val Thr Ile Ala Leu Asp
 130 135 140
 Ser Leu Ser Trp Leu Leu Leu Arg Leu Pro Cys Thr Thr Leu Cys Gln
 145 150 155 160
 Val Leu His Ala Val Ser His Gln Asp Ser Cys Pro Gly Glu Thr Pro
 165 170 175
 Pro Ser Leu Phe Pro Leu Ile His Leu Pro Leu Pro Arg Ser Val Pro
 180 185 190
 Leu Phe Leu Ser Thr Leu Glu
 195 199

<210> 3266
 <211> 294
 <212> PRT
 <213> Homo sapiens

<400> 3266
 Ala Ala Gly Ala Gly Ala Asp Gly Arg Glu Pro Ala Ser Glu Arg Ala
 1 5 10 15
 Ser Arg Ala Glu Pro Pro Ala Val Ala Met Gly Gln Asn Asp Leu Met
 20 25 30
 Gly Thr Ala Glu Asp Phe Ala Asp Gln Phe Leu Arg Val Thr Lys Gln
 35 40 45
 Tyr Leu Pro His Val Ala Arg Leu Cys Leu Ile Ser Thr Phe Leu Glu
 50 55 60
 Asp Gly Ile Arg Met Trp Phe Gln Trp Ser Glu Gln Arg Asp Tyr Ile
 65 70 75 80
 Asp Thr Thr Trp Asn Cys Gly Tyr Leu Leu Ala Ser Ser Phe Val Phe
 85 90 95
 Leu Asn Leu Leu Gly Gln Leu Thr Gly Cys Val Leu Val Leu Ser Arg
 100 105 110
 Asn Phe Val Gln Tyr Ala Cys Phe Gly Leu Phe Gly Ile Ile Ala Leu
 115 120 125
 Gln Thr Ile Ala Tyr Ser Ile Leu Trp Asp Leu Lys Phe Leu Met Arg

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      130              135              140
Asn Leu Ala Leu Gly Gly Gly Leu Leu Leu Leu Ala Glu Ser Arg
145              150              155              160
Ser Glu Gly Lys Ser Met Phe Ala Gly Val Pro Thr Met Arg Glu Ser
      165              170              175
Ser Pro Lys Gln Tyr Met Gln Leu Gly Gly Arg Val Leu Leu Val Leu
      180              185              190
Met Phe Met Thr Leu Leu His Phe Asp Ala Ser Phe Phe Ser Ile Val
      195              200              205
Gln Asn Ile Val Gly Thr Ala Leu Met Ile Leu Val Ala Ile Gly Phe
      210              215              220
Lys Thr Lys Leu Ala Ala Leu Thr Leu Val Val Trp Leu Phe Ala Ile
225              230              235              240
Asn Val Tyr Phe Asn Ala Phe Trp Thr Ile Pro Val Tyr Lys Pro Met
      245              250              255
His Asp Phe Leu Lys Tyr Asp Phe Phe Gln Thr Met Ser Val Ile Gly
      260              265              270
Gly Leu Leu Leu Val Val Ala Leu Gly Pro Gly Gly Val Ser Met Asp
      275              280              285
Glu Lys Lys Lys Glu Trp
      290              294

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<210> 3267
 <211> 70
 <212> PRT
 <213> Homo sapiens

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      <400> 3267
Ala Ser Thr Phe Cys Ser Ala Trp Lys Arg Arg Ser Thr Ala Ala Leu
  1              5              10              15
Trp Trp Ser Gly Ser Arg Ala Ser Arg Ser His Pro Arg Glu Leu Gly
      20              25              30
Pro Leu Cys Phe Val Phe Gly Thr Ala Ala Leu Ser Ile Arg Ser Met
      35              40              45
Asp Val Leu Ser Leu Phe Leu Glu His Gly Lys Leu Val Phe Ala Ser
      50              55              60
Gly Leu Ser Pro Arg Ala
      65              70

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<210> 3268
 <211> 63
 <212> PRT
 <213> Homo sapiens

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      <400> 3268
Glu Asp Ala Trp Ile Thr Asn Pro Ser Leu Ser Asn Ala Arg Ser Thr
  1              5              10              15
Pro Ser Lys Pro Leu Cys Tyr Thr Val Leu Lys Glu Gly Gln Val Val
      20              25              30
Gly Val Lys Thr Thr Lys Ala Ser Asn Thr Arg Glu Lys Leu Arg Pro
      35              40              45
Glu Ser Glu Arg Arg Met Val Lys Ser Phe Gly Asp Glu Val Thr
      50              55              60              63

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<210> 3269
 <211> 264

<212> PRT

<213> Homo sapiens

<400> 3269

Gly Ser Thr His Ala Ser Gly Ala Arg Pro Ser Leu Lys Arg Ala Arg
 1 5 10 15
 Ser Gln Arg Gly Arg Pro Leu Pro Ser Arg Ala Leu Pro Ser Ala His
 20 25 30
 Lys Asp Met Thr Thr Asn Ala Gly Pro Leu His Pro Tyr Trp Pro Gln
 35 40 45
 His Leu Arg Leu Asp Asn Phe Val Pro Asn Asp Arg Pro Thr Trp His
 50 55 60
 Ile Leu Ala Gly Leu Phe Ser Val Thr Gly Val Leu Val Val Thr Thr
 65 70 75 80
 Trp Leu Leu Ser Gly Arg Ala Ala Val Val Pro Leu Gly Thr Trp Arg
 85 90 95
 Arg Leu Ser Leu Cys Trp Phe Ala Val Cys Gly Phe Ile His Leu Val
 100 105 110
 Ile Glu Gly Trp Phe Val Leu Tyr Tyr Glu Asp Leu Leu Gly Asp Gln
 115 120 125
 Ala Phe Leu Ser Gln Leu Trp Lys Glu Tyr Ala Lys Gly Asp Ser Arg
 130 135 140
 Tyr Ile Leu Gly Asp Asn Phe Thr Val Cys Met Glu Thr Ile Thr Ala
 145 150 155 160
 Cys Leu Trp Gly Pro Leu Ser Leu Trp Val Val Ile Ala Phe Leu Arg
 165 170 175
 Gln His Pro Leu Arg Phe Ile Leu Gln Leu Val Val Ser Val Gly Gln
 180 185 190
 Ile Tyr Gly Asp Val Leu Tyr Phe Leu Thr Glu His Arg Asp Gly Phe
 195 200 205
 Gln His Gly Glu Leu Gly His Pro Leu Tyr Phe Trp Phe Tyr Phe Val
 210 215 220
 Phe Met Asn Ala Leu Trp Leu Val Leu Pro Gly Val Leu Val Leu Asp
 225 230 235 240
 Ala Val Lys His Leu Thr His Ala Gln Ser Thr Leu Asp Ala Lys Ala
 245 250 255
 Thr Lys Ala Lys Ser Lys Lys Asn
 260 264

<210> 3270

<211> 70

<212> PRT

<213> Homo sapiens

<400> 3270

Gly Asp Thr Gly Pro Gln Ile Leu Met Ser Tyr Leu Asp Ser Val Ala
 1 5 10 15
 Ser Lys Leu Leu Gln Met Val Lys Lys Leu Ser Gln Ser Phe Cys Ser
 20 25 30
 Asn Phe Lys Tyr Leu Thr Lys Tyr Ser Arg Lys Gln Val Ser Asp Glu
 35 40 45
 Ile Lys Lys Ser Arg Arg Thr Val Glu Ser Asn Pro Ile Phe Phe Lys
 50 55 60
 Lys Asn Lys Lys Ile Gln
 65 70

<210> 3271

<211> 44

<212> PRT

<213> Homo sapiens

<400> 3271

```

Ile Gln Ser Gly Leu Ser Leu Cys Phe Ala Asp Leu Ser Glu Thr Pro
 1           5           10           15
Glu Gly Arg Ala Gly Val Pro Gly Cys Pro His Ser Cys Asp Gly Val
          20           25           30
Ala Ser Gly Arg Pro Cys Ser Pro Ser Ser Ala Gly
      35           40           44

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<210> 3272

<211> 79

<212> PRT

<213> Homo sapiens

<400> 3272

```

Phe Gln Phe Ile Gln Ile Glu Leu Leu Asn Ile Leu Gln Ser Leu Ile
 1           5           10           15
Arg Asn Gln Thr Gln Ser Pro Tyr Asn Thr Thr Ala Tyr Pro Ala Ile
          20           25           30
Asp Ser Val Ile Thr Ile Leu Pro Phe Ser Phe Ser Cys Phe Phe Ile
      35           40           45
Ile Thr Lys Cys Phe Gly Leu Ser Ile Phe Pro Ser Val Ile Phe Phe
      50           55           60
Leu His Val Tyr Phe Ile Leu Thr Leu Val Val Phe Tyr Cys Cys
      65           70           75           79

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<210> 3273

<211> 501

<212> PRT

<213> Homo sapiens

<400> 3273

```

Gln Ala Trp Ser Leu Gln Val Ala Leu Ser Pro Phe Phe Phe Pro Ala
 1           5           10           15
Ser Pro Ser Asn Ser Phe Ala Ala Val Pro Gln Leu Leu Phe Pro
          20           25           30
Glu Leu Pro Leu Pro His Val Pro Gly Gln Glu Ser Ala Lys Arg Arg
      35           40           45
Ser Ala Arg Arg Phe Leu Ile Met Ser Glu Leu Thr Lys Glu Leu Met
      50           55           60
Glu Leu Val Trp Gly Thr Lys Ser Ser Pro Gly Leu Ser Asp Thr Ile
      65           70           75           80
Phe Cys Arg Trp Thr Gln Gly Phe Val Phe Ser Glu Ser Glu Gly Ser
          85           90           95
Ala Leu Glu Gln Phe Glu Gly Gly Pro Cys Ala Val Ile Ala Pro Val
          100           105           110
Gln Ala Phe Leu Leu Lys Lys Leu Leu Phe Ser Ser Glu Lys Ser Ser
          115           120           125
Trp Arg Asp Cys Ser Gln Glu Gln Lys Glu Leu Leu Cys His Thr
          130           135           140
Leu Cys Asp Ile Leu Glu Ser Ala Cys Cys Asp His Ser Gly Ser Tyr
          145           150           155           160
Cys Leu Val Ser Trp Leu Arg Gly Lys Thr Thr Glu Glu Thr Ala Ser
          165           170           175
Ile Ser Gly Ser Pro Ala Glu Ser Ser Cys Gln Val Glu His Ser Ser

```

180	185	190
Ala Leu Ala Val Glu Glu Leu Gly Phe Glu Arg Phe His Ala Leu Ile		
195	200	205
Gln Lys Arg Ser Phe Arg Ser Leu Pro Glu Leu Lys Asp Ala Val Leu		
210	215	220
Asp Gln Tyr Ser Met Trp Gly Asn Lys Phe Gly Val Leu Leu Phe Leu		
225	230	235
Tyr Ser Val Leu Leu Thr Lys Gly Ile Glu Asn Ile Lys Asn Glu Ile		
245	250	255
Glu Asp Ala Ser Glu Pro Leu Ile Asp Pro Val Tyr Gly His Gly Ser		
260	265	270
Gln Ser Leu Ile Asn Leu Leu Leu Thr Gly His Ala Val Ser Asn Val		
275	280	285
Trp Asp Gly Asp Arg Glu Cys Ser Gly Met Lys Leu Leu Gly Ile His		
290	295	300
Glu Gln Ala Ala Val Gly Phe Leu Thr Leu Met Glu Ala Leu Arg Tyr		
305	310	315
Cys Lys Val Gly Ser Tyr Leu Lys Ile Ser Lys Ile Pro Tyr Leu Asp		
325	330	335
Cys Leu Ala Ser Glu Thr His Leu Thr Val Phe Phe Ala Lys Asp Met		
340	345	350
Ala Leu Val Ala Pro Glu Ala Pro Ser Glu Gln Ala Arg Arg Val Phe		
355	360	365
Gln Thr Tyr Asp Pro Glu Asp Asn Gly Phe Ile Pro Asp Ser Leu Leu		
370	375	380
Glu Asp Val Met Lys Ala Leu Asp Leu Val Ser Asp Pro Glu Tyr Ile		
385	390	395
Asn Leu Met Lys Asn Lys Leu Asp Pro Glu Gly Leu Gly Ile Ile Leu		
405	410	415
Leu Gly Pro Phe Leu Gln Glu Phe Phe Pro Asp Gln Gly Ser Ser Gly		
420	425	430
Pro Glu Ser Phe Thr Val Tyr His Tyr Asn Gly Leu Lys Gln Ser Asn		
435	440	445
Tyr Asn Glu Lys Val Met Tyr Val Glu Gly Thr Ala Val Val Met Gly		
450	455	460
Phe Glu Asp Pro Met Leu Gln Thr Asp Asp Thr Pro Ile Lys Arg Cys		
465	470	475
Leu Gln Thr Lys Trp Pro Tyr Ile Glu Leu Leu Trp Thr Thr Asp Arg		
485	490	495
Ser Pro Ser Leu Asn		
500 501		

<210> 3274

<211> 390

<212> PRT

<213> Homo sapiens

<400> 3274

Arg Val Val His Arg Phe Phe Lys Ser Ser Ala Phe Trp Pro Ala Glu	
1 5 10 15	
Val Lys Gln Pro Arg Gly Gly Pro Lys Thr Gly Ser Arg Lys Glu Gly	
20 25 30	
Ala Gly Ser Arg Ala Pro Gln Pro Val Val Arg Ser Phe Cys Gly Ser	
35 40 45	
Val Gly Ala Glu Gly Arg Met Glu Lys Leu Arg Leu Leu Gly Leu Arg	
50 55 60	
Tyr Gln Glu Tyr Val Thr Arg His Pro Ala Ala Thr Ala Gln Leu Glu	
65 70 75 80	
Thr Ala Val Arg Gly Phe Ser Tyr Leu Leu Ala Gly Arg Phe Ala Asp	
85 90 95	
Ser His Glu Leu Ser Glu Leu Val Tyr Ser Ala Ser Asn Leu Leu Val	

100	105	110
Leu Leu Asn Asp Gly Ile Leu Arg Lys Lys Glu Leu Arg Lys Lys Leu Pro		
115	120	125
Val Ser Leu Ser Gln Gln Lys Leu Leu Thr Trp Leu Ser Val Leu Glu		
130	135	140
Cys Val Glu Val Phe Met Glu Met Gly Ala Ala Lys Val Trp Gly Glu		
145	150	155
Val Gly Arg Trp Leu Val Ile Ala Leu Ile Gln Leu Ala Lys Ala Val		
165	170	175
Leu Arg Met Leu Leu Leu Trp Phe Lys Ala Gly Leu Gln Thr Ser		
180	185	190
Pro Pro Ile Val Pro Leu Asp Arg Glu Thr Gln Ala Gln Pro Pro Asp		
195	200	205
Gly Asp His Ser Pro Gly Asn His Glu Gln Ser Tyr Val Gly Lys Arg		
210	215	220
Ser Asn Arg Val Val Arg Thr Leu Gln Asn Thr Pro Ser Leu His Ser		
225	230	235
Arg His Trp Gly Ala Pro Gln Gln Arg Glu Gly Arg Gln Gln Gln His		
245	250	255
His Glu Glu Leu Ser Ala Thr Pro Thr Pro Leu Gly Leu Gln Glu Thr		
260	265	270
Ile Ala Glu Phe Leu Tyr Ile Ala Arg Pro Leu Leu His Leu Leu Ser		
275	280	285
Leu Gly Leu Trp Gly Gln Arg Ser Trp Lys Pro Trp Leu Leu Ala Gly		
290	295	300
Val Val Asp Val Thr Ser Leu Ser Leu Leu Ser Asp Arg Lys Gly Leu		
305	310	315
Thr Arg Arg Glu Arg Arg Glu Leu Arg Arg Arg Thr Ile Leu Leu Leu		
325	330	335
Tyr Tyr Leu Leu Arg Ser Pro Phe Tyr Asp Arg Phe Ser Glu Ala Arg		
340	345	350
Ile Leu Phe Leu Leu Gln Leu Leu Ala Asp His Val Pro Gly Val Gly		
355	360	365
Leu Val Thr Arg Pro Leu Met Asp Tyr Leu Pro Thr Trp Gln Lys Ile		
370	375	380
Tyr Phe Tyr Ser Trp Gly		
385	390	

<210> 3275
 <211> 61
 <212> PRT
 <213> Homo sapiens

<400> 3275
Ser Val Tyr Ser Ala Ser Ser Cys Lys Cys Cys Asn Tyr Arg Lys Thr
1 5 10 15
Glu Gln Ile Pro Asp Cys Glu Gln Pro Pro Ala Ser Ser Met Pro Glu
20 25 30
Arg Pro Ser His Glu Ser Gln Pro Thr Pro Gln Met Met Pro Leu Ser
35 40 45
Ala Pro Ser Arg Ala Glu Glu Leu Gly Gln Arg Pro Gly
50 55 60 61

<210> 3276
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 3276

Lys Ala Ala Gly His Arg Leu Leu Leu Ala Ala Gly His Pro Ser Met
 1 5 10 15
 Pro Ser Ser Asp Cys Leu Leu Trp Glu Gly Ser Leu Glu Leu Arg Pro
 20 25 30
 Leu Gln His Ile Ser Ser Leu Leu Val Leu Val Ser Thr Thr Cys Leu
 35 40 45
 Phe Ala Phe Pro Arg Val Pro Ile Ala Phe Glu Ser Lys Ser Cys Leu
 50 55 60
 Ile Tyr His Cys His Cys Ala Phe Thr Val Arg His Tyr Met Cys Ser
 65 70 75 80
 Ser His Thr Gly
 84

<210> 3277

<211> 737

<212> PRT

<213> Homo sapiens

<400> 3277

Lys Leu Gly Val Glu Pro Glu Glu Glu Gly Gly Gly Asp Asp Glu Glu
 1 5 10 15
 Asp Ala Glu Ala Trp Ala Met Glu Leu Ala Asp Val Gly Ala Ala Ala
 20 25 30
 Ser Ser Gln Gly Val His Asp Gln Val Leu Pro Thr Pro Asn Ala Ser
 35 40 45
 Ser Arg Val Ile Val His Val Asp Leu Asp Cys Phe Tyr Ala Gln Val
 50 55 60
 Glu Met Ile Ser Asn Pro Glu Leu Lys Asp Lys Pro Leu Gly Val Gln
 65 70 75 80
 Gln Lys Tyr Leu Val Val Thr Cys Asn Tyr Glu Ala Arg Lys Leu Gly
 85 90 95
 Val Lys Lys Leu Met Asn Val Arg Asp Ala Lys Glu Lys Cys Pro Gln
 100 105 110
 Leu Val Leu Val Asn Gly Glu Asp Leu Thr Arg Tyr Arg Glu Met Ser
 115 120 125
 Tyr Lys Val Thr Glu Leu Leu Glu Glu Phe Ser Pro Val Val Glu Arg
 130 135 140
 Leu Gly Phe Asp Glu Asn Phe Val Asp Leu Thr Glu Met Val Glu Lys
 145 150 155 160
 Arg Leu Gln Gln Leu Gln Ser Asp Glu Leu Ser Ala Val Thr Val Ser
 165 170 175
 Gly His Val Tyr Asn Asn Gln Ser Ile Asn Leu Leu Asp Val Leu His
 180 185 190
 Ile Arg Leu Leu Val Gly Ser Gln Ile Ala Ala Glu Met Arg Glu Ala
 195 200 205
 Met Tyr Asn Gln Leu Gly Leu Thr Gly Cys Ala Gly Val Ala Ser Asn
 210 215 220
 Lys Leu Leu Ala Lys Leu Val Ser Gly Val Phe Lys Pro Asn Gln Gln
 225 230 235 240
 Thr Val Leu Leu Pro Glu Ser Cys Gln His Leu Ile His Ser Leu Asn
 245 250 255
 His Ile Lys Glu Ile Pro Gly Ile Gly Tyr Lys Thr Ala Lys Cys Leu
 260 265 270
 Glu Ala Leu Gly Ile Asn Ser Val Arg Asp Leu Gln Thr Phe Ser Pro
 275 280 285
 Lys Ile Leu Glu Lys Glu Leu Gly Ile Ser Val Ala Gln Arg Ile Gln
 290 295 300
 Lys Leu Ser Phe Gly Glu Asp Asn Ser Pro Val Ile Leu Ser Gly Pro
 305 310 315 320
 Pro Gln Ser Phe Ser Glu Glu Asp Ser Phe Lys Lys Cys Ser Ser Glu

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<210> 3278
<211> 292
<212> PRT
<213> Homo sapiens
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4972

1	5	10	15
Met Ala Ala Glu Thr Arg Asn Val Ala Gly Ala Glu Ala Pro Pro Pro			
20	25	30	
Gln Lys Arg Tyr Tyr Arg Gln Arg Ala His Ser Asn Pro Met Ala Asp			
35	40	45	
His Thr Leu Arg Tyr Pro Val Lys Pro Glu Glu Met Asp Trp Ser Glu			
50	55	60	
Leu Tyr Pro Glu Phe Phe Ala Pro Leu Thr Gln Asn Gln Ser His Asp			
65	70	75	80
Asp Pro Lys Asp Lys Lys Glu Lys Arg Ala Gln Ala Gln Val Glu Phe			
85	90	95	
Ala Asp Ile Gly Cys Gly Tyr Gly Gly Leu Leu Val Glu Leu Ser Pro			
100	105	110	
Leu Phe Pro Asp Thr Leu Ile Leu Gly Leu Glu Ile Arg Val Lys Val			
115	120	125	
Ser Asp Tyr Val Gln Asp Arg Ile Arg Ala Leu Arg Ala Ala Pro Ala			
130	135	140	
Gly Gly Phe Gln Asn Ile Ala Cys Leu Arg Ser Asn Ala Met Lys His			
145	150	155	160
Leu Pro Asn Phe Phe Tyr Lys Gly Gln Leu Thr Lys Met Phe Phe Leu			
165	170	175	
Phe Pro Asp Pro His Phe Lys Arg Thr Lys His Lys Trp Arg Ile Ile			
180	185	190	
Ser Pro Thr Leu Leu Ala Glu Tyr Ala Tyr Val Leu Arg Val Gly Gly			
195	200	205	
Leu Val Tyr Thr Ile Thr Asp Val Leu Glu Leu His Asp Trp Met Cys			
210	215	220	
Thr His Phe Glu Glu His Pro Leu Phe Glu Arg Val Pro Leu Glu Asp			
225	230	235	240
Leu Ser Glu Asp Pro Val Val Gly His Leu Gly Thr Ser Thr Glu Glu			
245	250	255	
Gly Lys Lys Val Leu Arg Asn Gly Gly Lys Asn Phe Pro Ala Ile Phe			
260	265	270	
Arg Arg Ile Gln Asp Pro Val Leu Gln Ala Val Thr Ser Gln Thr Ser			
275	280	285	
Leu Pro Gly His			
290	292		

<210> 3279

<211> 949

<212> PRT

<213> Homo sapiens

<400> 3279

Thr Arg Thr Lys Arg Arg Leu Gly Arg Glu Lys Ala Met Ala Ser Pro			
1	5	10	15
Pro Arg Gly Trp Gly Cys Gly Glu Leu Leu Leu Pro Phe Met Leu Leu			
20	25	30	
Gly Thr Leu Cys Glu Pro Gly Ser Gly Gln Ile Arg Tyr Ser Met Pro			
35	40	45	
Glu Glu Leu Asp Lys Gly Ser Phe Val Gly Asn Ile Ala Lys Asp Leu			
50	55	60	
Gly Leu Glu Pro Gln Glu Leu Ala Glu Arg Gly Val Arg Ile Val Ser			
65	70	75	80
Arg Gly Arg Thr Gln Leu Phe Ala Leu Asn Pro Arg Ser Gly Ser Leu			
85	90	95	
Val Thr Ala Gly Arg Ile Asp Arg Glu Glu Leu Cys Ala Gln Ser Pro			
100	105	110	
Leu Cys Val Val Asn Phe Asn Ile Leu Val Glu Asn Lys Met Lys Ile			
115	120	125	
Tyr Gly Val Glu Val Glu Ile Ile Asp Ile Asn Asp Asn Phe Pro Arg			

130	135	140
Phe Arg Asp Glu Glu Leu	Lys Val Lys Val Asn Glu Asn Ala Ala Ala	
145	150	155
Gly Thr Arg Leu Val Leu	Pro Phe Ala Arg Asp Ala Asp Val Gly Val	
165	170	175
Asn Ser Leu Arg Ser Tyr	Gln Leu Ser Ser Asn Leu His Phe Ser Leu	
180	185	190
Asp Val Val Ser Gly Thr	Asp Gly Gln Lys Tyr Pro Glu Leu Val Leu	
195	200	205
Glu Gln Pro Leu Asp Arg	Glu Lys Glu Thr Val His Asp Leu Leu Leu	
210	215	220
Thr Ala Leu Asp Gly Gly	Asp Pro Val Leu Ser Gly Thr Thr His Ile	
225	230	235
Arg Val Thr Val Leu Asp	Ala Asn Asp Asn Ala Pro Leu Phe Thr Pro	
245	250	255
Ser Glu Tyr Ser Val Ser	Val Pro Glu Asn Ile Pro Val Gly Thr Arg	
260	265	270
Leu Leu Met Leu Thr Ala	Thr Asp Pro Asp Glu Gly Ile Asn Gly Lys	
275	280	285
Leu Thr Tyr Ser Phe Arg	Asn Glu Glu Glu Lys Ile Ser Glu Thr Phe	
290	295	300
Gln Leu Asp Ser Asn Leu	Gly Glu Ile Ser Thr Leu Gln Ser Leu Asp	
305	310	315
Tyr Glu Glu Ser Arg Phe	Tyr Leu Met Glu Val Val Ala Gln Asp Gly	
325	330	335
Gly Ala Leu Val Ala Ser	Ala Lys Val Val Thr Val Gln Asp Val	
340	345	350
Asn Asp Asn Ala Pro Glu	Val Ile Leu Thr Ser Leu Thr Ser Ser Ile	
355	360	365
Ser Glu Asp Cys Leu Pro	Gly Thr Val Ile Ala Leu Phe Ser Val His	
370	375	380
Asp Gly Asp Ser Gly Glu	Asn Gly Glu Ile Ala Cys Ser Ile Pro Arg	
385	390	395
Asn Leu Pro Phe Lys Leu	Glu Lys Ser Val Asp Asn Tyr Tyr His Leu	
405	410	415
Leu Thr Thr Arg Asp Leu	Asp Arg Glu Glu Thr Ser Asp Tyr Asn Ile	
420	425	430
Thr Leu Thr Val Met Asp	His Gly Thr Pro Pro Leu Ser Thr Glu Ser	
435	440	445
His Ile Pro Leu Lys Val	Ala Asp Val Asn Asp Asn Pro Pro Asn Phe	
450	455	460
Pro Gln Ala Ser Tyr Ser	Thr Ser Val Thr Glu Asn Asn Pro Arg Gly	
465	470	475
Val Ser Ile Phe Ser Val	Thr Ala His Asp Pro Asp Ser Gly Asp Asn	
485	490	495
Ala Arg Val Thr Tyr Ser	Leu Ala Glu Asp Thr Phe Gln Gly Ala Pro	
500	505	510
Leu Ser Ser Tyr Val Ser	Ile Asn Ser Asp Thr Gly Val Leu Tyr Ala	
515	520	525
Leu Arg Ser Phe Asp Tyr	Glu Gln Leu Arg Asp Leu Gln Leu Trp Val	
530	535	540
Thr Ala Ser Asp Ser Gly	Asn Pro Pro Leu Ser Ser Asn Val Ser Leu	
545	550	555
Ser Leu Phe Val Leu Asp	Gln Asn Asp Asn Thr Pro Glu Ile Leu Tyr	
565	570	575
Pro Ala Leu Pro Thr Asp	Gly Ser Thr Gly Val Glu Leu Ala Pro Arg	
580	585	590
Ser Ala Glu Pro Gly Tyr	Leu Val Thr Lys Val Val Ala Val Asp Lys	
595	600	605
Asp Ser Gly Gln Asn Ala	Trp Leu Ser Tyr Arg Leu Leu Lys Ala Ser	
610	615	620
Glu Pro Gly Leu Phe Ala	Val Gly Leu His Thr Gly Glu Val Arg Thr	
625	630	635
Ala Arg Ala Leu Leu Asp	Arg Asp Ala Leu Lys Gln Ser Leu Val Val	

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<210> 3280
<211> 379
<212> PRT
<213> Homo sapiens
```

4975

115		120		125
Phe Lys Ser Ile Phe Arg Ile His Thr Glu Thr Gly Asn Ile Trp Thr				
130		135		140
His Leu Leu Gly Phe Val Leu Phe Leu Phe Leu Gly Ile Leu Thr Met				
145		150		155
Leu Arg Pro Asn Met Tyr Phe Met Ala Pro Leu Gln Glu Lys Val Val				
	165		170	175
Phe Gly Met Phe Phe Leu Gly Ala Val Leu Cys Leu Ser Phe Ser Trp				
	180		185	190
Leu Phe His Thr Val Tyr Cys His Ser Glu Lys Val Ser Arg Thr Phe				
	195		200	205
Ser Lys Leu Asp Tyr Ser Gly Ile Ala Leu Leu Ile Met Gly Ser Phe				
	210		215	220
Val Pro Trp Leu Tyr Tyr Ser Phe Tyr Cys Ser Pro Gln Pro Arg Leu				
225		230		235
Ile Tyr Leu Ser Ile Val Cys Val Leu Gly Ile Ser Ala Ile Ile Val				
	245		250	255
Ala Gln Trp Asp Arg Phe Ala Thr Pro Lys His Arg Gln Thr Arg Ala				
	260		265	270
Gly Val Phe Leu Gly Leu Gly Leu Ser Gly Val Val Pro Thr Met His				
	275		280	285
Phe Thr Ile Ala Glu Gly Phe Val Lys Ala Thr Thr Val Gly Gln Met				
	290		295	300
Gly Trp Phe Phe Leu Met Ala Val Met Tyr Ile Thr Gly Ala Gly Leu				
305		310		315
Tyr Ala Ala Arg Ile Pro Glu Arg Phe Phe Pro Gly Lys Phe Asp Ile				
	325		330	335
Trp Phe Gln Ser His Gln Ile Phe His Val Leu Val Val Ala Ala Ala				
	340		345	350
Phe Val His Phe Tyr Gly Val Ser Asn Leu Gln Glu Phe Arg Tyr Gly				
	355		360	365
Leu Glu Gly Gly Cys Thr Asp Asp Thr Leu Leu				
370		375		379

<210> 3281
 <211> 185
 <212> PRT
 <213> Homo sapiens

<400> 3281
 Arg Pro Arg Arg Arg Gln Pro Ser Phe Ser Cys Arg Val Leu Val Leu
 1 5 10 15
 Glu Asp Pro Pro Cys Phe Arg Phe Thr Asn Ser Met Asn Gln Glu Lys
 20 25 30
 Leu Ala Lys Leu Gln Ala Gln Val Arg Ile Gly Gly Lys Gly Thr Ala
 35 40 45
 Arg Arg Lys Lys Lys Val Val His Arg Thr Ala Thr Ala Asp Asp Lys
 50 55 60
 Lys Leu Gln Ser Ser Leu Lys Lys Leu Ala Val Asn Asn Ile Ala Gly
 65 70 75 80
 Ile Glu Glu Val Asn Met Ile Lys Asp Asp Gly Thr Val Ile His Phe
 85 90 95
 Asn Asn Pro Lys Val Gln Ala Ser Leu Ser Ala Asn Thr Phe Ala Ile
 100 105 110
 Thr Gly His Ala Glu Ala Lys Pro Ile Thr Glu Met Leu Pro Gly Ile
 115 120 125
 Leu Ser Gln Leu Gly Ala Asp Ser Leu Thr Ser Leu Arg Lys Leu Ala
 130 135 140
 Glu Gln Phe Pro Arg Gln Val Leu Asp Ser Lys Ala Pro Lys Pro Glu
 145 150 155 160
 Asp Ile Asp Glu Glu Asp Asp Asp Val Pro Asp Leu Val Glu Asn Phe

165 170 175
 Asp Glu Ala Ser Lys Asn Glu Ala Asn
 180 185

<210> 3282
 <211> 328
 <212> PRT
 <213> Homo sapiens

<400> 3282
 His Ala Leu Gly Arg Arg Gly Gly Ser Gln Glu Leu Ser Ala Ala Ala
 1 5 10 15
 Cys Gly Cys Phe Ala Leu Arg Leu Arg Ala Pro Gly Ser Gly Arg Pro
 20 25 30
 Ala Leu Ala Pro Gly Ala Ala Ala Phe Ala Gly Leu Gly Gly Ala Pro
 35 40 45
 Arg Phe Pro Pro Arg Gly Ser Ala Ala Gly Arg Thr Met Leu Leu Lys
 50 55 60
 Glu Tyr Arg Ile Cys Met Pro Leu Thr Val Asp Glu Tyr Lys Ile Gly
 65 70 75 80
 Gln Leu Tyr Met Ile Ser Lys His Ser His Glu Gln Ser Asp Arg Gly
 85 90 95
 Glu Gly Val Glu Val Val Gln Asn Glu Pro Phe Glu Asp Pro His His
 100 105 110
 Gly Asn Gly Gln Phe Thr Glu Lys Arg Val Tyr Leu Asn Ser Lys Leu
 115 120 125
 Pro Ser Trp Ala Arg Ala Val Val Pro Lys Ile Phe Tyr Val Thr Glu
 130 135 140
 Lys Ala Trp Asn Tyr Tyr Pro Tyr Thr Ile Thr Glu Tyr Thr Cys Ser
 145 150 155 160
 Phe Leu Pro Lys Phe Ser Ile His Ile Glu Thr Lys Tyr Glu Asp Asn
 165 170 175
 Lys Gly Ser Asn Asp Thr Ile Phe Asp Asn Glu Ala Lys Asp Val Glu
 180 185 190
 Arg Glu Val Cys Phe Ile Asp Ile Ala Cys Asp Glu Ile Pro Glu Arg
 195 200 205
 Tyr Tyr Lys Glu Ser Glu Asp Pro Lys His Phe Lys Ser Glu Lys Thr
 210 215 220
 Gly Arg Gly Gln Leu Arg Glu Gly Trp Arg Asp Ser His Gln Pro Ile
 225 230 235 240
 Met Cys Ser Tyr Lys Leu Val Thr Val Lys Phe Glu Val Trp Gly Leu
 245 250 255
 Gln Thr Arg Val Glu Gln Phe Val His Lys Val Val Arg Asp Ile Leu
 260 265 270
 Leu Ile Gly His Arg Gln Ala Phe Ala Trp Val Asp Glu Trp Tyr Asp
 275 280 285
 Met Thr Met Asp Asp Val Arg Glu Tyr Glu Lys Asn Met His Glu Gln
 290 295 300
 Thr Asn Ile Lys Val Cys Asn Gln His Ser Ser Pro Val Asp Asp Ile
 305 310 315 320
 Glu Ser His Ala Gln Thr Ser Thr
 325 328

<210> 3283
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 3283

```

Ile Lys Ser Lys Leu Asn Gln Gln Val Glu Val Gln Glu Ser Glu Trp
 1           5           10           15
Arg Leu Thr Glu Ala Lys Gly Pro Thr Met Gly Lys Glu Ser Gly Trp
          20           25           30
Asp Ser Gly Arg Ala Ala Val Ala Ala Val Val Gly Gly Val Val Ala
          35           40           45
Val Gly Thr Val Leu Val Ala Leu Ser Ala Met Gly Phe Thr Ser Val
          50           55           60
Gly Ile Ala Ala Ser Ser Ile Ala Ala Lys Met Met Ser Thr Ala Ala
          65           70           75           80
Ile Ala Asn Gly Gly Gly Val Ala Ala Gly Ser Leu Val Ala Ile Leu
          85           90           95
Gln Ser Val Gly Ala Ala Gly Leu Ser Val Thr Ser Lys Val Ile Gly
          100          105          110
Gly Phe Ala Gly Thr Ala Leu Gly Ala Trp Leu Gly Ser Pro Pro Ser
          115          120          125
Ser
129

```

<210> 3284

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3284

```

Thr Ser Asn Ser Leu Leu Arg Pro Asp Arg Met Ser Val Met Asp Leu
 1           5           10           15
Ala Asn Thr Cys Ser Ser Phe Gln Ser Asp Leu Asp Phe Cys Ser Asp
          20           25           30
Cys Gly Ser Val Leu Pro Leu Pro Gly Ala Gln Asp Thr Val Thr Cys
          35           40           45
Ile Arg Cys Gly Phe Asn Ile Asn Val Arg Asp Phe Glu Gly Lys Val
          50           55           60
Val Lys Thr Ser Val Val Phe His Gln Leu Gly Thr Ala Met Pro Met
          65           70           75           80
Ser Val Glu Glu Gly Pro Glu Cys Gln Gly Pro Val Val Asp Arg Arg
          85           90           95
Cys Pro Arg Cys Gly His Glu Gly Met Ala Tyr His Thr Arg Gln Met
          100          105          110
Arg Ser Ala Asp Glu Gly Gln Thr Val Phe Tyr Thr Cys Thr Asn Cys
          115          120          125
Lys Phe Gln Glu Lys Glu Asp Ser
          130          135 136

```

<210> 3285

<211> 470

<212> PRT

<213> Homo sapiens

<400> 3285

```

His Arg Leu Ser Tyr Asp Glu Ala Phe Ala Met Ala Asn Asp Pro Leu
 1           5           10           15
Glu Gly Phe His Glu Val Asn Leu Ala Ser Pro Thr Ser Pro Asp Leu
          20           25           30
Leu Gly Val Tyr Glu Ser Gly Thr Gln Glu Gln Thr Thr Ser Pro Ser
          35           40           45
Val Ile Tyr Arg Pro His Pro Ser Ala Leu Ser Ser Val Pro Ile Gln

```

50	55	60
Ala Asn Ala Leu Asp Val Ser Glu Leu Pro Thr Gln Pro Val Tyr Ser		
65	70	75
Ser Pro Arg Arg Leu Asn Cys Ala Glu Ile Ser Ser Ile Ser Phe His		80
	85	90
Val Thr Asp Pro Ala Pro Cys Ser Thr Ser Gly Val Thr Ala Gly Leu		95
	100	105
Thr Lys Leu Thr Thr Arg Lys Asp Asn Tyr Asn Ala Glu Arg Glu Phe		110
	115	120
Leu Gln Gly Ala Thr Ile Thr Glu Ala Cys Asp Gly Ser Asp Asp Ile		125
	130	135
Phe Gly Leu Ser Thr Asp Ser Leu Ser Arg Leu Arg Ser Pro Ser Val		140
145	150	155
Leu Glu Val Arg Glu Lys Gly Tyr Glu Arg Leu Lys Glu Glu Leu Ala		160
	165	170
Lys Ala Gln Arg Glu Leu Lys Leu Lys Asp Glu Glu Cys Glu Arg Leu		175
	180	185
Ser Lys Val Arg Asp Gln Leu Gly Gln Glu Leu Glu Glu Leu Thr Ala		190
	195	200
Ser Leu Phe Glu Glu Ala His Lys Met Val Arg Glu Ala Asn Ile Lys		205
	210	215
Gln Ala Thr Ala Glu Lys Gln Leu Lys Glu Ala Gln Gly Lys Ile Asp		220
225	230	235
Val Leu Gln Ala Glu Val Ala Ala Leu Lys Thr Leu Val Leu Ser Ser		240
	245	250
Ser Pro Thr Ser Pro Thr Gln Glu Pro Leu Pro Gly Gly Lys Thr Pro		255
	260	265
Phe Lys Lys Gly His Thr Arg Asn Lys Ser Thr Ser Ser Ala Met Ser		270
	275	280
Gly Ser His Gln Asp Leu Ser Val Ile Gln Pro Ile Val Lys Asp Cys		285
	290	295
Lys Glu Ala Asp Leu Ser Leu Tyr Asn Glu Phe Arg Leu Trp Lys Asp		300
305	310	315
Glu Pro Thr Met Asp Arg Thr Cys Pro Phe Leu Asp Lys Ile Tyr Gln		320
	325	330
Glu Asp Ile Phe Pro Cys Leu Thr Phe Ser Lys Ser Glu Leu Ala Ser		335
	340	345
Ala Val Leu Glu Ala Val Glu Asn Asn Thr Leu Ser Ile Glu Pro Val		350
	355	360
Gly Leu Gln Pro Ile Arg Phe Val Lys Ala Ser Ala Val Glu Cys Gly		365
	370	375
Gly Pro Lys Lys Cys Ala Leu Thr Gly Gln Ser Lys Ser Cys Lys His		380
385	390	395
Arg Ile Lys Leu Gly Asp Ser Ser Asn Tyr Tyr Ile Ser Pro Phe		400
	405	410
Cys Arg Tyr Arg Ile Thr Ser Val Cys Asn Phe Phe Thr Tyr Ile Arg		415
	420	425
Tyr Ile Gln Gln Gly Leu Val Lys Gln Gln Asp Val Asp Gln Met Phe		430
	435	440
Trp Glu Val Met Gln Leu Arg Lys Glu Met Ser Leu Ala Lys Leu Gly		445
	450	455
Tyr Phe Lys Glu Glu Leu		460
465	470	

<210> 3286
 <211> 195
 <212> PRT
 <213> Homo sapiens

<400> 3286
 Gly Pro Ser Gln Ser Met Ala Ala Gly Glu Leu Glu Gly Gly Lys Pro

```

      1           5           10           15
Leu Ser Gly Leu Leu Asn Ala Leu Ala Gln Asp Thr Phe His Gly Tyr
      20           25           30
Pro Gly Ile Thr Glu Glu Leu Leu Arg Ser Gln Leu Tyr Pro Glu Val
      35           40           45
Pro Pro Glu Glu Phe Arg Pro Phe Leu Ala Lys Met Arg Gly Ile Leu
      50           55           60
Lys Ser Ile Ala Ser Ala Asp Met Asp Phe Asn Gln Leu Glu Ala Phe
      65           70           75           80
Leu Thr Ala Gln Thr Lys Lys Gln Gly Gly Ile Thr Ser Asp Gln Ala
      85           90           95
Ala Val Ile Ser Lys Phe Trp Lys Ser His Lys Thr Lys Ile Arg Glu
      100           105           110
Ser Leu Met Asn Gln Ser Arg Trp Asn Ser Gly Leu Arg Gly Leu Ser
      115           120           125
Trp Arg Val Asp Gly Lys Ser Gln Ser Arg His Ser Ala Gln Ile His
      130           135           140
Thr Pro Val Ala Ile Ile Glu Leu Glu Leu Gly Lys Tyr Gly Gln Glu
      145           150           155           160
Ser Glu Phe Leu Cys Leu Glu Phe Asp Glu Val Lys Val Asn Gln Ile
      165           170           175
Leu Lys Thr Leu Ser Glu Val Glu Glu Ser Ile Ser Thr Leu Ile Ser
      180           185           190
Gln Pro Asn
      195

```

```

<210> 3287
<211> 113
<212> PRT
<213> Homo sapiens

```

```

      <400> 3287
Leu Gly Ala Met Ala Lys His His Pro Asp Leu Ile Phe Cys Arg Lys
      1           5           10           15
Gln Ala Gly Val Ala Ile Gly Arg Leu Cys Glu Lys Cys Asp Gly Lys
      20           25           30
Cys Val Ile Cys Asp Ser Tyr Val Arg Pro Cys Thr Leu Val Arg Ile
      35           40           45
Cys Asp Glu Cys Asn Tyr Gly Ser Tyr Gln Gly Arg Cys Val Ile Cys
      50           55           60
Gly Gly Pro Gly Val Ser Asp Ala Tyr Tyr Cys Lys Glu Cys Thr Ile
      65           70           75           80
Gln Glu Lys Asp Arg Asp Gly Cys Pro Lys Ile Val Asn Leu Gly Ser
      85           90           95
Ser Lys Thr Asp Leu Phe Tyr Glu Arg Lys Lys Tyr Gly Phe Lys Lys
      100           105           110
Arg
113

```

```

<210> 3288
<211> 141
<212> PRT
<213> Homo sapiens

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```

      <400> 3288
Arg Thr Thr Phe Phe Arg Phe Arg Pro Cys Glu Ser Leu Cys Gly Asp
      1           5           10           15
Met Lys Leu Leu Thr His Asn Leu Leu Ser Ser His Val Arg Gly Val

```

```
<210> 3289
<211> 581
<212> PRT
<213> Homo sapiens
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4981

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305          310          315          320
Arg His Lys Arg Ser His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Gln
          325          330          335
Cys Gly Lys Val Phe Ile Ser Phe Ser Ser Ile Gln Tyr His Lys Met
          340          345          350
Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Gln Cys Gly Lys Ala
          355          360          365
Phe Arg Cys Gly Ser His Leu Gln Lys His Gly Arg Thr His Thr Gly
          370          375          380
Glu Lys Pro Tyr Glu Cys Arg Gln Cys Gly Lys Ala Phe Arg Cys Thr
385          390          395          400
Ser Asp Leu Gln Arg His Glu Lys Thr His Thr Glu Asp Lys Pro Tyr
          405          410          415
Gly Cys Lys Gln Cys Gly Lys Gly Phe Arg Cys Ala Ser Gln Leu Gln
          420          425          430
Ile His Glu Arg Thr His Ser Gly Glu Lys Pro His Glu Cys Lys Glu
          435          440          445
Cys Gly Lys Val Phe Lys Tyr Phe Ser Ser Leu Arg Ile His Glu Arg
450          455          460
Thr His Thr Gly Glu Lys Pro His Glu Cys Lys Gln Cys Gly Lys Ala
465          470          475          480
Phe Arg Tyr Phe Ser Ser Leu His Ile His Glu Arg Thr His Thr Gly
          485          490          495
Asp Lys Pro Tyr Glu Cys Lys Val Cys Gly Lys Ala Phe Thr Cys Ser
          500          505          510
Ser Ser Ile Arg Tyr His Glu Arg Thr His Thr Gly Glu Lys Pro Tyr
          515          520          525
Glu Cys Lys His Cys Gly Lys Ala Phe Ile Ser Asn Tyr Ile Arg Tyr
          530          535          540
His Glu Arg Thr His Thr Gly Glu Lys Pro Tyr Gln Cys Lys Gln Cys
545          550          555          560
Gly Lys Ala Phe Ile Arg Ala Ser Ser Cys Arg Glu His Glu Arg Thr
          565          570          575
His Thr Ile Asn Arg
          580 581

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<210> 3290
<211> 449
<212> PRT
<213> Homo sapiens

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```

<400> 3290
Gly Arg Pro Arg Ser Ser Ser Asp Asn Arg Asn Phe Leu Arg Glu Arg
 1          5          10          15
Ala Gly Leu Ser Ser Ala Ala Val Gln Thr Arg Ile Gly Asn Ser Ala
          20          25          30
Ala Ser Arg Arg Ser Pro Ala Ala Arg Pro Pro Val Pro Ala Pro Pro
          35          40          45
Ala Leu Pro Arg Gly Arg Pro Gly Thr Glu Gly Ser Thr Ser Leu Ser
          50          55          60
Ala Pro Ala Val Leu Val Val Ala Val Ala Val Val Val Val Val
          65          70          75          80
Ser Ala Val Ala Trp Ala Met Ala Asn Tyr Ile His Val Pro Pro Gly
          85          90          95
Ser Pro Glu Val Pro Lys Leu Asn Val Thr Val Gln Asp Gln Glu Glu
          100          105          110
His Arg Cys Arg Glu Gly Ala Leu Ser Leu Leu Gln His Leu Arg Pro
          115          120          125
His Trp Asp Pro Gln Glu Val Thr Leu Gln Leu Phe Thr Asp Gly Ile
          130          135          140
Thr Asn Lys Leu Ile Gly Cys Tyr Val Gly Asn Thr Met Glu Asp Val

```

```

145          150          155          160
Val Leu Val Arg Ile Tyr Gly Asn Lys Thr Glu Leu Leu Val Asp Arg
          165          170          175
Asp Glu Glu Val Lys Ser Phe Arg Val Leu Gln Ala His Gly Cys Ala
          180          185          190
Pro Gln Leu Tyr Cys Thr Phe Asn Asn Gly Leu Cys Tyr Glu Phe Ile
          195          200          205
Gln Gly Glu Ala Leu Asp Pro Lys His Val Cys Asn Pro Ala Ile Phe
          210          215          220
Arg Leu Ile Ala Arg Gln Leu Ala Lys Ile His Ala Ile His Ala His
225          230          235          240
Asn Gly Trp Ile Pro Lys Ser Asn Leu Trp Leu Lys Met Gly Lys Tyr
          245          250          255
Phe Ser Leu Ile Pro Thr Gly Phe Ala Asp Glu Asp Ile Asn Lys Arg
          260          265          270
Phe Leu Ser Asp Ile Pro Ser Ser Gln Ile Leu Gln Glu Glu Met Thr
          275          280          285
Trp Met Lys Glu Ile Leu Ser Asn Leu Gly Ser Pro Val Val Leu Cys
          290          295          300
His Asn Asp Leu Leu Cys Lys Asn Ile Ile Tyr Asn Glu Lys Gln Gly
305          310          315          320
Asp Val Gln Phe Ile Asp Tyr Glu Tyr Ser Gly Tyr Asn Tyr Leu Ala
          325          330          335
Tyr Asp Ile Gly Asn His Phe Asn Glu Phe Ala Gly Val Ser Asp Val
          340          345          350
Asp Tyr Ser Leu Tyr Pro Asp Arg Glu Leu Gln Ser Gln Trp Leu Arg
          355          360          365
Ala Tyr Leu Glu Ala Tyr Lys Glu Phe Lys Gly Phe Gly Thr Glu Val
          370          375          380
Thr Glu Lys Glu Val Glu Ile Leu Phe Ile Gln Val Asn Gln Phe Ala
385          390          395          400
Leu Ala Ser His Phe Phe Trp Gly Leu Trp Ala Leu Ile Gln Ala Lys
          405          410          415
Tyr Ser Thr Ile Glu Phe Asp Phe Leu Gly Tyr Ala Ile Val Arg Phe
          420          425          430
Asn Gln Tyr Phe Lys Met Lys Pro Glu Val Thr Ala Leu Lys Val Pro
          435          440          445
Glu
449

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<210> 3291
<211> 245
<212> PRT
<213> Homo sapiens

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```

          <400> 3291
Pro Glu Ala Gln Thr Ser Ala Val Leu Ala Arg Glu Lys Gly His Leu
 1          5          10          15
Pro Thr Met Arg His Glu Ala Pro Met Gln Met Ala Ser Ala Gln Asp
          20          25          30
Ala Arg Tyr Gly Gln Lys Asp Ser Ser Asp Gln Asn Phe Asp Tyr Met
          35          40          45
Phe Lys Leu Leu Ile Ile Gly Asn Ser Ser Val Gly Lys Thr Ser Phe
          50          55          60
Leu Phe Arg Tyr Ala Asp Asp Ser Phe Thr Ser Ala Phe Val Ser Thr
          65          70          75          80
Val Gly Ile Asp Phe Lys Val Lys Thr Val Phe Lys Asn Glu Lys Arg
          85          90          95
Ile Lys Leu Gln Ile Trp Asp Thr Ala Gly Gln Glu Arg Tyr Arg Thr
          100          105          110
Ile Thr Thr Ala Tyr Tyr Arg Gly Ala Met Gly Phe Ile Leu Met Tyr

```

```

      115      120      125
Asp Ile Thr Asn Glu Glu Ser Phe Asn Ala Val Gln Asp Trp Ser Thr
  130      135      140
Gln Ile Lys Thr Tyr Ser Trp Asp Asn Ala Gln Val Ile Leu Val Gly
  145      150      155      160
Asn Lys Cys Asp Met Glu Asp Glu Arg Val Ile Ser Thr Glu Arg Gly
      165      170      175
Gln His Leu Gly Glu Gln Leu Gly Phe Glu Phe Phe Glu Thr Ser Ala
      180      185      190
Lys Asp Asn Ile Asn Val Lys Gln Thr Phe Glu Arg Leu Val Asp Ile
      195      200      205
Ile Cys Asp Lys Met Ser Glu Ser Leu Glu Thr Asp Pro Ala Ile Thr
      210      215      220
Ala Ala Lys Gln Asn Thr Arg Leu Lys Glu Thr Pro Pro Pro Pro Gln
  225      230      235      240
Pro Asn Cys Ala Cys
      245

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<210> 3292
<211> 1378
<212> PRT
<213> Homo sapiens

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```

      <400> 3292
Asp Arg Pro Pro Trp Asn Ser Arg Val Asp Asp Phe Val Thr Asn Leu
  1      5      10      15
Ile His Leu Ser Ser Lys Gly His Ile Ser Pro Ala Lys Asp Thr Ser
      20      25      30
Leu Gln Gln Arg Thr Pro Ala Glu Met Ser Pro Val Leu His Phe Tyr
      35      40      45
Val Arg Pro Ser Gly His Glu Gly Ala Ala Ser Gly His Thr Arg Arg
      50      55      60
Lys Leu Gln Gly Lys Leu Pro Glu Leu Gln Gly Val Glu Thr Glu Leu
      65      70      75      80
Cys Tyr Asn Val Asn Trp Thr Ala Glu Ala Leu Pro Ser Ala Glu Glu
      85      90      95
Thr Lys Lys Leu Met Trp Leu Phe Gly Cys Pro Leu Leu Leu Asp Asp
      100      105      110
Val Ala Arg Glu Ser Trp Leu Leu Pro Gly Ser Asn Asp Leu Leu Leu
      115      120      125
Glu Val Gly Pro Arg Leu Asn Phe Ser Thr Pro Thr Ser Thr Asn Ile
      130      135      140
Val Ser Val Cys Arg Ala Thr Gly Leu Gly Pro Val Asp Arg Val Glu
  145      150      155      160
Thr Thr Arg Arg Tyr Arg Leu Ser Phe Ala His Pro Pro Ser Ala Glu
      165      170      175
Val Glu Ala Ile Ala Leu Ala Thr Leu His Asp Arg Met Thr Glu Gln
      180      185      190
His Phe Pro His Pro Ile Gln Ser Phe Ser Pro Glu Ser Met Pro Glu
      195      200      205
Pro Leu Asn Gly Pro Ile Asn Ile Leu Gly Glu Gly Arg Leu Ala Leu
      210      215      220
Glu Lys Ala Asn Gln Glu Leu Gly Leu Ala Leu Asp Ser Trp Asp Leu
  225      230      235      240
Asp Phe Tyr Thr Lys Arg Phe Gln Glu Leu Gln Arg Asn Pro Ser Thr
      245      250      255
Val Glu Ala Phe Asp Leu Ala Gln Ser Asn Ser Glu His Ser Arg His
      260      265      270
Trp Phe Phe Lys Gly Gln Leu His Val Asp Gly Gln Lys Leu Val His
      275      280      285
Ser Leu Phe Glu Ser Ile Met Ser Thr Gln Glu Ser Ser Asn Pro Asn

```

290	295	300
Asn Val Leu Lys Phe Cys	Asp Asn Ser Ser Ala	Ile Gln Gly Lys Glu
305	310	315
Val Arg Phe Leu Arg Pro	Glu Asp Pro Thr Arg Pro	Ser Arg Phe Gln
325	330	335
Gln Gln Gln Gly Leu Arg	His Val Val Phe Thr Ala	Glu Thr His Asn
340	345	350
Phe Pro Thr Gly Val Cys	Pro Phe Ser Gly Ala Thr	Thr Gly Thr Gly
355	360	365
Gly Arg Ile Arg Asp Val	Gln Cys Thr Gly Arg Gly	Ala His Val Val
370	375	380
Ala Gly Thr Ala Gly Tyr	Cys Phe Gly Asn Leu His	Ile Pro Gly Tyr
385	390	395
Asn Leu Pro Trp Glu Asp	Leu Ser Phe Gln Tyr Pro	Gly Asn Phe Ala
405	410	415
Arg Pro Leu Glu Val Ala	Ile Glu Ala Ser Asn Gly	Ala Ser Asp Tyr
420	425	430
Gly Asn Lys Phe Gly Glu	Pro Val Leu Ala Gly Phe	Ala Arg Ser Leu
435	440	445
Gly Leu Gln Leu Pro Asp	Gly Gln Arg Arg Glu Trp	Ile Lys Pro Ile
450	455	460
Met Phe Ser Gly Gly Ile	Gly Ser Met Glu Ala Asp	His Ile Ser Lys
465	470	475
Glu Ala Pro Glu Pro Gly	Met Glu Val Val Lys Val	Gly Gly Pro Val
485	490	495
Tyr Arg Ile Gly Val Gly	Gly Gly Ala Ala Ser Ser	Val Gln Val Gln
500	505	510
Gly Asp Asn Thr Ser Asp	Leu Asp Phe Gly Ala Val	Gln Arg Gly Asp
515	520	525
Pro Glu Met Glu Gln Lys	Met Asn Arg Val Ile Arg	Ala Cys Val Glu
530	535	540
Ala Pro Lys Gly Asn Pro	Ile Cys Ser Leu His Asp	Gln Gly Ala Gly
545	550	555
Gly Asn Gly Asn Val Leu	Lys Glu Leu Ser Asp Pro	Ala Gly Ala Ile
565	570	575
Ile Tyr Thr Ser Arg Phe	Gln Leu Gly Asp Pro Thr	Leu Asn Ala Leu
580	585	590
Glu Ile Trp Gly Ala Glu	Tyr Gln Glu Ser Asn Ala	Leu Leu Leu Arg
595	600	605
Ser Pro Asn Arg Asp Phe	Leu Thr His Val Ser Ala	Arg Glu Arg Cys
610	615	620
Pro Ala Cys Phe Val Gly	Thr Ile Thr Gly Asp Arg	Arg Ile Val Leu
625	630	635
Val Asp Asp Arg Glu Cys	Pro Val Arg Arg Asn Gly	Gln Gly Asp Ala
645	650	655
Pro Pro Thr Pro Pro Thr	Pro Val Asp Leu Glu Leu	Glu Trp Val
660	665	670
Leu Gly Lys Met Pro Arg	Lys Glu Phe Phe Leu Gln	Arg Lys Pro Pro
675	680	685
Met Leu Gln Pro Leu Ala	Leu Pro Pro Gly Leu Ser	Val His Gln Ala
690	695	700
Leu Glu Arg Val Leu Arg	Leu Pro Ala Val Ala Ser	Lys Arg Tyr Leu
705	710	715
Thr Asn Lys Val Asp Arg	Ser Val Gly Gly Leu Val	Ala Gln Gln Gln
725	730	735
Cys Val Gly Pro Leu Gln	Thr Pro Leu Ala Asp Val	Ala Val Val Ala
740	745	750
Leu Ser His Glu Glu Leu	Ile Gly Ala Ala Thr Ala	Leu Gly Glu Gln
755	760	765
Pro Val Lys Ser Leu Leu	Asp Pro Lys Val Ala Ala	Arg Leu Ala Val
770	775	780
Ala Glu Ala Leu Thr Asn	Leu Val Phe Ala Leu Val	Thr Asp Leu Arg
785	790	795
Asp Val Lys Cys Ser Gly	Asn Trp Met Trp Ala Ala	Lys Leu Pro Gly

				805					810					815	
Glu	Gly	Ala	Ala	Leu	Ala	Asp	Ala	Cys	Glu	Ala	Met	Val	Ala	Val	Met
			820						825					830	
Ala	Ala	Leu	Gly	Val	Ala	Val	Asp	Gly	Gly	Lys	Asp	Ser	Leu	Ser	Met
		835					840					845			
Ala	Ala	Arg	Val	Gly	Thr	Glu	Thr	Val	Arg	Ala	Pro	Gly	Ser	Leu	Val
		850				855					860				
Ile	Ser	Ala	Tyr	Ala	Val	Cys	Pro	Asp	Ile	Thr	Ala	Thr	Val	Thr	Pro
		865			870					875					880
Asp	Leu	Lys	His	Pro	Glu	Gly	Arg	Gly	His	Leu	Leu	Tyr	Val	Ala	Leu
			885						890						895
Ser	Pro	Gly	Gln	His	Arg	Leu	Gly	Gly	Thr	Ala	Leu	Ala	Gln	Cys	Phe
			900				905						910		
Ser	Gln	Leu	Gly	Glu	His	Pro	Pro	Asp	Leu	Asp	Leu	Pro	Glu	Asn	Leu
		915					920						925		
Val	Arg	Ala	Phe	Ser	Ile	Thr	Gln	Gly	Leu	Leu	Lys	Asp	Arg	Leu	Leu
		930				935					940				
Cys	Ser	Gly	His	Asp	Val	Ser	Asp	Gly	Gly	Leu	Val	Thr	Cys	Leu	Leu
		945			950					955					960
Glu	Met	Ala	Phe	Ala	Gly	Asn	Cys	Gly	Leu	Gln	Val	Asp	Val	Pro	Val
			965						970					975	
Pro	Arg	Val	Asp	Val	Leu	Ser	Val	Leu	Phe	Ala	Glu	Glu	Pro	Gly	Leu
			980					985					990		
Val	Leu	Glu	Val	Gln	Glu	Pro	Asp	Leu	Ala	Gln	Val	Leu	Lys	Arg	Tyr
		995				1000						1005			
Arg	Asp	Ala	Gly	Leu	His	Cys	Leu	Glu	Leu	Gly	His	Thr	Gly	Glu	Ala
		1010				1015					1020				
Gly	Pro	His	Ala	Met	Val	Arg	Val	Ser	Val	Asn	Gly	Ala	Val	Val	Leu
		1025			1030					1035					1040
Glu	Glu	Pro	Val	Gly	Glu	Leu	Arg	Ala	Leu	Trp	Glu	Glu	Thr	Ser	Phe
			1045						1050					1055	
Gln	Leu	Asp	Arg	Leu	Gln	Ala	Glu	Pro	Arg	Cys	Val	Ala	Glu	Glu	Glu
			1060				1065						1070		
Arg	Gly	Leu	Arg	Glu	Arg	Met	Gly	Pro	Ser	Tyr	Cys	Leu	Pro	Pro	Thr
		1075				1080					1085				
Phe	Pro	Lys	Ala	Ser	Val	Pro	Arg	Glu	Pro	Gly	Gly	Pro	Ser	Pro	Arg
		1090			1095						1100				
Val	Ala	Ile	Leu	Arg	Glu	Gly	Ser	Asn	Gly	Asp	Arg	Glu	Met	Ala	
		1105			1110				1115					1120	
Asp	Ala	Phe	His	Leu	Ala	Gly	Phe	Glu	Val	Trp	Asp	Val	Thr	Met	Gln
			1125						1130					1135	
Asp	Leu	Cys	Ser	Gly	Ala	Ile	Gly	Leu	Asp	Thr	Phe	Arg	Gly	Val	Ala
			1140				1145						1150		
Phe	Val	Gly	Gly	Phe	Ser	Tyr	Ala	Asp	Val	Leu	Gly	Ser	Ala	Lys	Gly
		1155				1160					1165				
Trp	Ala	Ala	Ala	Val	Thr	Phe	His	Pro	Arg	Ala	Gly	Ala	Glu	Leu	Arg
		1170				1175					1180				
Arg	Phe	Arg	Lys	Arg	Pro	Asp	Thr	Phe	Ser	Leu	Gly	Val	Cys	Asn	Gly
		1185			1190				1195						1200
Cys	Gln	Leu	Leu	Ala	Leu	Leu	Gly	Trp	Val	Gly	Gly	Asp	Pro	Asn	Glu
			1205						1210					1215	
Asp	Ala	Ala	Glu	Met	Gly	Pro	Asp	Ser	Gln	Pro	Ala	Arg	Pro	Gly	Leu
			1220				1225						1230		
Leu	Leu	Arg	His	Asn	Leu	Ser	Gly	Arg	Tyr	Glu	Ser	Arg	Trp	Ala	Ser
		1235					1240					1245			
Val	Arg	Val	Gly	Pro	Gly	Pro	Ala	Leu	Met	Leu	Arg	Gly	Met	Glu	Gly
		1250				1255					1260				
Ala	Val	Leu	Pro	Val	Trp	Ser	Ala	His	Gly	Glu	Gly	Tyr	Val	Ala	Phe
		1265			1270				1275						1280
Ser	Ser	Pro	Glu	Leu	Gln	Ala	Gln	Ile	Glu	Ala	Arg	Gly	Leu	Ala	Pro
			1285					1290						1295	
Leu	His	Trp	Ala	Asp	Asp	Asp	Gly	Asn	Pro	Thr	Glu	Gln	Tyr	Pro	Leu
			1300				1305						1310		
Asn	Pro	Asn	Gly	Ser	Pro	Gly	Gly	Val	Ala	Gly	Ile	Cys	Ser	Cys	Asp

1315 1320 1325
 Gly Arg His Leu Ala Val Met Pro His Pro Glu Arg Ala Val Arg Pro
 1330 1335 1340
 Trp Gln Trp Ala Trp Arg Pro Pro Pro Phe Asp Thr Leu Thr Thr Ser
 1345 1350 1355 1360
 Pro Trp Leu Gln Leu Phe Ile Asn Ala Arg Asn Trp Thr Leu Glu Gly
 1365 1370 1375
 Ser Cys
 1378

<210> 3293
 <211> 192
 <212> PRT
 <213> Homo sapiens

<400> 3293
 Gly Val Arg Gly Phe Trp Ala Gly Thr Met Ala Ser Arg Ala Gly Pro
 1 5 10 15
 Arg Ala Ala Gly Thr Asp Gly Ser Asp Phe Gln His Arg Glu Arg Val
 20 25 30
 Ala Met His Tyr Gln Met Ser Val Thr Leu Lys Tyr Glu Ile Lys Lys
 35 40 45
 Leu Ile Tyr Val His Leu Val Ile Trp Leu Leu Leu Val Ala Lys Met
 50 55 60
 Ser Val Gly His Leu Arg Leu Leu Ser His Asp Gln Val Ala Met Pro
 65 70 75 80
 Tyr Gln Trp Glu Tyr Pro Tyr Leu Leu Ser Ile Leu Pro Ser Leu Leu
 85 90 95
 Gly Leu Leu Ser Phe Pro Arg Asn Asn Ile Ser Tyr Leu Val Leu Ser
 100 105 110
 Met Ile Ser Met Gly Leu Phe Ser Ile Ala Pro Leu Ile Tyr Gly Ser
 115 120 125
 Met Glu Met Phe Pro Ala Ala Gln Gln Leu Tyr Arg His Gly Lys Ala
 130 135 140
 Tyr Arg Phe Leu Phe Gly Phe Ser Ala Val Ser Ile Met Tyr Leu Val
 145 150 155 160
 Leu Val Leu Ala Val Gln Val His Ala Trp Gln Leu Tyr Tyr Ser Lys
 165 170 175
 Lys Leu Leu Asp Ser Trp Phe Thr Ser Thr Gln Glu Lys Lys His Lys
 180 185 190 192

<210> 3294
 <211> 595
 <212> PRT
 <213> Homo sapiens

<400> 3294
 Ser Gln Arg Ser Cys Pro Arg Ser Pro Ser Ser Pro Ala Pro Pro Trp
 1 5 10 15
 Ala Arg Cys Ser Asn Pro Asp Ser Arg Thr Gly Gly Val Pro Val Pro
 20 25 30
 Arg Ala Trp Ser Ala Gly Gly Pro Ala Leu Gly Leu Met Ala Ala Pro
 35 40 45
 Val Arg Leu Gly Arg Lys Arg Pro Leu Pro Ala Cys Pro Asn Pro Leu
 50 55 60
 Phe Val Arg Trp Leu Thr Glu Trp Arg Asp Glu Ala Thr Arg Ser Arg

65					70					75				80
His	Arg	Thr	Arg	Phe	Val	Phe	Gln	Lys	Ala	Leu	Arg	Ser	Leu	Arg
				85					90					95
Tyr	Pro	Leu	Pro	Leu	Arg	Ser	Gly	Lys	Glu	Ala	Lys	Ile	Leu	Gln
			100					105					110	
Phe	Gly	Asp	Gly	Leu	Cys	Arg	Met	Leu	Asp	Glu	Arg	Leu	Gln	Arg
		115					120					125		
Arg	Thr	Ser	Gly	Gly	Asp	His	Ala	Pro	Asp	Ser	Pro	Ser	Gly	Glu
	130					135					140			Asn
Ser	Pro	Ala	Pro	Gln	Gly	Arg	Leu	Ala	Glu	Val	Gln	Asp	Ser	Ser
145				150					155					160
Pro	Val	Pro	Ala	Gln	Pro	Lys	Ala	Gly	Gly	Ser	Gly	Ser	Tyr	Trp
			165					170						175
Ala	Arg	His	Ser	Gly	Ala	Arg	Val	Ile	Leu	Leu	Val	Leu	Tyr	Arg
		180						185					190	
His	Leu	Asn	Pro	Asn	Gly	His	His	Phe	Leu	Thr	Lys	Glu	Glu	Leu
	195					200						205		Leu
Gln	Arg	Cys	Ala	Gln	Lys	Ser	Pro	Arg	Val	Ala	Pro	Gly	Ser	Ala
	210					215					220			Arg
Pro	Trp	Pro	Ala	Leu	Arg	Ser	Leu	Leu	His	Arg	Asn	Leu	Val	Leu
225				230					235					240
Thr	His	Gln	Pro	Ala	Arg	Tyr	Ser	Leu	Thr	Pro	Glu	Gly	Leu	Glu
			245					250						255
Ala	Gln	Lys	Leu	Ala	Glu	Ser	Glu	Gly	Leu	Ser	Leu	Leu	Asn	Val
		260						265					270	Gly
Ile	Gly	Pro	Lys	Glu	Pro	Pro	Gly	Glu	Glu	Thr	Ala	Val	Pro	Gly
	275					280					285			Ala
Ala	Ser	Ala	Glu	Leu	Ala	Ser	Glu	Ala	Gly	Val	Gln	Gln	Gln	Pro
	290				295					300				Leu
Glu	Leu	Arg	Pro	Gly	Glu	Tyr	Arg	Val	Leu	Leu	Cys	Val	Asp	Ile
305				310					315					320
Glu	Thr	Arg	Gly	Gly	Gly	His	Arg	Pro	Glu	Leu	Leu	Arg	Glu	Leu
			325					330					335	Gln
Arg	Leu	His	Val	Thr	His	Thr	Val	Arg	Lys	Leu	His	Val	Gly	Asp
		340					345						350	Phe
Val	Trp	Val	Ala	Gln	Glu	Thr	Asn	Pro	Arg	Asp	Pro	Ala	Asn	Pro
	355					360					365			Gly
Glu	Leu	Val	Leu	Asp	His	Ile	Val	Glu	Arg	Lys	Arg	Leu	Asp	Asp
	370				375					380				Leu
Cys	Ser	Ser	Ile	Ile	Asp	Gly	Arg	Phe	Arg	Glu	Gln	Lys	Phe	Arg
385				390				395						400
Lys	Arg	Cys	Gly	Leu	Glu	Arg	Arg	Val	Tyr	Leu	Val	Glu	Glu	His
		405						410					415	Gly
Ser	Val	His	Asn	Leu	Ser	Leu	Pro	Glu	Ser	Thr	Leu	Leu	Gln	Ala
		420					425					430		Val
Thr	Asn	Thr	Gln	Val	Ile	Asp	Gly	Phe	Phe	Val	Lys	Arg	Thr	Ala
	435					440					445			Asp
Ile	Lys	Glu	Ser	Ala	Ala	Tyr	Leu	Ala	Leu	Leu	Thr	Arg	Gly	Leu
	450				455					460				Gln
Arg	Leu	Tyr	Gln	Gly	His	Thr	Leu	Arg	Ser	Arg	Pro	Trp	Gly	Thr
465				470					475					480
Gly	Asn	Pro	Glu	Ser	Gly	Ala	Met	Thr	Ser	Pro	Asn	Pro	Leu	Cys
		485						490					495	Ser
Leu	Leu	Thr	Phe	Ser	Asp	Phe	Asn	Ala	Gly	Ala	Ile	Lys	Asn	Lys
		500					505					510		Ala
Gln	Ser	Val	Arg	Glu	Val	Phe	Ala	Arg	Gln	Leu	Met	Gln	Val	Arg
	515					520					525			Gly
Val	Ser	Gly	Glu	Lys	Ala	Ala	Ala	Leu	Val	Asp	Arg	Tyr	Ser	Thr
	530					535				540				Pro
Ala	Ser	Leu	Leu	Ala	Ala	Tyr	Asp	Ala	Cys	Ala	Thr	Pro	Lys	Glu
545				550				555						560
Glu	Thr	Leu	Leu	Ser	Thr	Ile	Lys	Cys	Gly	Arg	Leu	Gln	Arg	Asn
		565					570					575		Leu
Gly	Pro	Ala	Leu	Ser	Arg	Thr	Leu	Ser	Gln	Leu	Tyr	Cys	Ser	Tyr

Pro Leu Thr
595

580

585

590

<210> 3295
<211> 371
<212> PRT
<213> Homo sapiens

<400> 3295

Glu Phe His Pro His Thr Gln Val Ser Gly Leu Leu Thr Pro Gln Leu
1 5 10 15
Gln Glu Pro Asp Val Trp Ser Pro Ser Arg Gly Gln Pro Val Ser Leu
20 25 30
His Leu Pro Gly Lys Gly Ala Pro Glu Val Lys Glu Met Ala Trp Trp
35 40 45
Lys Ser Trp Ile Glu Gln Glu Gly Val Thr Val Lys Ser Ser Ser His
50 55 60
Phe Asn Pro Asp Pro Asp Ala Glu Thr Leu Tyr Lys Ala Met Lys Gly
65 70 75 80
Ile Gly Thr Asn Glu Gln Ala Ile Ile Asp Val Leu Thr Lys Arg Ser
85 90 95
Asn Thr Gln Arg Gln Gln Ile Ala Lys Ser Phe Lys Ala Gln Phe Gly
100 105 110
Lys Asp Leu Thr Glu Thr Leu Lys Ser Glu Leu Ser Gly Lys Phe Glu
115 120 125
Arg Leu Ile Val Ala Leu Met Tyr Pro Pro Tyr Arg Tyr Glu Ala Lys
130 135 140
Glu Leu His Asp Ala Met Lys Gly Leu Gly Thr Lys Glu Gly Val Ile
145 150 155 160
Ile Glu Ile Leu Ala Ser Arg Thr Lys Asn Gln Leu Arg Glu Ile Met
165 170 175
Lys Ala Tyr Glu Glu Asp Tyr Gly Ser Ser Leu Glu Glu Asp Ile Gln
180 185 190
Ala Asp Thr Ser Gly Tyr Leu Glu Arg Ile Leu Val Cys Leu Leu Gln
195 200 205
Gly Ser Arg Asp Asp Val Ser Ser Phe Val Asp Pro Ala Leu Ala Leu
210 215 220
Gln Asp Ala Gln Asp Leu Tyr Ala Ala Gly Glu Lys Ile Arg Gly Thr
225 230 235 240
Asp Glu Met Lys Phe Ile Thr Ile Leu Cys Thr Arg Ser Ala Thr His
245 250 255
Leu Leu Arg Val Phe Glu Glu Tyr Glu Lys Ile Ala Asn Lys Ser Ile
260 265 270
Glu Asp Ser Ile Lys Ser Glu Thr His Gly Ser Leu Glu Glu Ala Met
275 280 285
Leu Thr Val Val Lys Cys Thr Gln Asn Leu His Ser Tyr Phe Ala Glu
290 295 300
Arg Leu Tyr Tyr Ala Met Lys Gly Ala Gly Thr Arg Asp Gly Thr Leu
305 310 315 320
Ile Arg Asn Ile Val Ser Arg Ser Glu Ile Asp Leu Asn Leu Ile Lys
325 330 335
Cys His Phe Lys Lys Met Tyr Gly Lys Thr Leu Ser Ser Met Ile Met
340 345 350
Glu Asp Thr Ser Gly Asp Tyr Lys Asn Ala Leu Leu Ser Leu Val Gly
355 360 365
Ser Asp Pro
370 371

<210> 3296
 <211> 279
 <212> PRT
 <213> Homo sapiens

<400> 3296
 Gly Thr Arg Gly Gly Val Gly Pro Gly Asp Asn Gly Gly Val Glu Ala
 1 5 10 15
 Gly Ala Lys Pro Gly Ala Ala Ala Ile Pro Leu Arg Gly Asp Gly Ser
 20 25 30
 Gly Glu Thr Gly Pro Gly Arg Val Ala Pro Gly Glu Val Arg Gly Ser
 35 40 45
 Pro Arg Gly His Val Ala Gly Pro Glu Gly Pro Arg Glu Val Leu Phe
 50 55 60
 Phe Phe Phe Leu Pro Ser Ser Lys Pro Ala Ser Glu Val Ile Asn Glu
 65 70 75 80
 Tyr Ser Trp Lys Val Asp Phe Leu Lys Gly Met Leu Gln Ala Glu Lys
 85 90 95
 Leu Thr Ser Ser Ser Glu Lys Ala Leu Ala Asn Gln Phe Leu Ala Pro
 100 105 110
 Gly Arg Val Pro Thr Thr Ala Arg Glu Arg Val Pro Ala Thr Lys Thr
 115 120 125
 Val His Leu Gln Ser Arg Ala Arg Tyr Thr Ser Glu Met Arg Ser Glu
 130 135 140
 Leu Leu Gly Thr Asp Ser Ala Glu Pro Glu Met Asp Val Arg Lys Arg
 145 150 155 160
 Thr Gly Val Ala Gly Ser Gln Pro Val Ser Glu Lys Gln Ser Ala Ala
 165 170 175
 Glu Leu Asp Leu Val Leu Gln Arg His Gln Asn Leu Gln Glu Lys Leu
 180 185 190
 Ala Glu Glu Met Leu Gly Leu Ala Arg Ser Leu Lys Thr Asn Thr Leu
 195 200 205
 Ala Ala Gln Ser Val Ile Lys Lys Asp Asn Gln Thr Leu Ser His Ser
 210 215 220
 Leu Lys Met Ala Asp Gln Asn Leu Glu Lys Leu Lys Thr Glu Ser Glu
 225 230 235 240
 Arg Leu Glu Gln His Thr Gln Lys Ser Val Asn Trp Leu Leu Trp Ala
 245 250 255
 Met Leu Ile Ile Val Cys Phe Ile Phe Ile Ser Met Ile Leu Phe Ile
 260 265 270
 Arg Ile Met Pro Lys Leu Lys
 275 279

<210> 3297
 <211> 190
 <212> PRT
 <213> Homo sapiens

<400> 3297
 His Lys Gln Pro Ala Gly Phe Leu Gly Leu Trp Leu Gly Thr Glu Thr
 1 5 10 15
 Tyr Thr Ile Ser Phe Pro Gly Pro Glu Thr Phe Gly Leu Gly Leu Ser
 20 25 30
 His Ala Thr Gly Ile Pro Gly Ser Pro Ala Cys Arg Gln Pro Val Val
 35 40 45
 Gly Leu His Ser Leu His Asn Tyr Arg Met Ala Met Val Ser Ala Met
 50 55 60
 Ser Trp Val Leu Tyr Leu Trp Ile Ser Ala Cys Ala Met Leu Leu Cys
 65 70 75 80
 His Gly Ser Leu Gln His Thr Phe Gln Gln His His Leu His Arg Pro

```
<210> 3298
<211> 197
<212> PRT
<213> Homo sapiens
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```
<210> 3299
<211> 295
<212> PRT
<213> Homo sapiens
```

4991

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      35      40      45
Leu Ala Arg Ala Ser Ala Pro Leu Leu Arg Val Pro Leu Ser Asp Ser
  50      55      60
Trp Ala Leu Leu Pro Ala Ser Ala Gly Val Lys Thr Leu Leu Pro Val
  65      70      75      80
Pro Ser Phe Glu Asp Val Ser Ile Pro Glu Lys Pro Lys Leu Arg Phe
      85      90      95
Ile Glu Arg Ala Pro Leu Val Pro Lys Val Arg Arg Glu Pro Lys Asn
      100      105      110
Leu Ser Asp Ile Arg Gly Pro Ser Thr Glu Ala Thr Glu Phe Thr Glu
      115      120      125
Gly Asn Phe Ala Ile Leu Ala Leu Gly Gly Gly Tyr Leu His Trp Gly
      130      135      140
His Phe Glu Met Met Arg Leu Thr Ile Asn Arg Ser Met Asp Pro Lys
      145      150      155      160
Asn Met Phe Ala Ile Trp Arg Val Pro Ala Pro Phe Lys Pro Ile Thr
      165      170      175
Arg Lys Ser Val Gly His Arg Met Gly Gly Gly Lys Gly Ala Ile Asp
      180      185      190
His Tyr Val Thr Pro Val Lys Ala Gly Arg Leu Val Val Glu Met Gly
      195      200      205
Gly Arg Cys Glu Phe Glu Glu Val Gln Gly Phe Leu Asp Gln Val Ala
      210      215      220
His Lys Leu Pro Phe Ala Ala Lys Ala Val Ser Arg Gly Thr Leu Glu
      225      230      235      240
Lys Met Arg Lys Asp Gln Glu Glu Arg Glu Arg Asn Asn Gln Asn Pro
      245      250      255
Trp Thr Phe Glu Arg Ile Ala Thr Ala Asn Met Leu Gly Ile Arg Lys
      260      265      270
Val Leu Ser Pro Tyr Asp Leu Thr His Lys Gly Lys Tyr Trp Gly Lys
      275      280      285
Phe Tyr Met Pro Lys Arg Val
      290      295

```

<210> 3300
 <211> 615
 <212> PRT
 <213> Homo sapiens

```

      <400> 3300
Phe Val Ala Gly Gly Pro Arg Gly Ser Gly Ser Ala Ala Glu Thr Met
  1      5      10      15
Pro Glu Ile Arg Val Thr Pro Leu Gly Ala Gly Gln Asp Val Gly Arg
      20      25      30
Ser Cys Ile Leu Val Ser Ile Ala Gly Lys Asn Val Met Leu Asp Cys
      35      40      45
Gly Met His Met Gly Phe Asn Asp Asp Arg Arg Phe Pro Asp Phe Ser
      50      55      60
Tyr Ile Thr Gln Asn Gly Arg Leu Thr Asp Phe Leu Asp Cys Val Ile
      65      70      75      80
Ile Ser His Phe His Leu Asp His Cys Gly Ala Leu Pro Tyr Phe Ser
      85      90      95
Glu Met Val Gly Tyr Asp Gly Pro Ile Tyr Met Thr His Pro Thr Gln
      100      105      110
Ala Ile Cys Pro Ile Leu Leu Glu Asp Tyr Arg Lys Ile Ala Val Asp
      115      120      125
Lys Lys Gly Glu Ala Asn Phe Phe Thr Ser Gln Met Ile Lys Asp Cys
      130      135      140
Met Lys Lys Val Val Ala Val His Leu His Gln Thr Val Gln Val Asp
      145      150      155      160
Asp Glu Leu Glu Ile Lys Ala Tyr Tyr Ala Gly His Val Leu Gly Ala

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Ala	Met	Phe	Gln	Ile	Lys	Val	Gly	Ser	Glu	Ser	Val	Val	Tyr	Thr	Gly
			180						185						190
Asp	Tyr	Asn	Met	Thr	Pro	Asp	Arg	His	Leu	Gly	Ala	Ala	Trp	Ile	Asp
		195					200					205			
Lys	Cys	Arg	Pro	Asn	Leu	Leu	Ile	Thr	Glu	Ser	Thr	Tyr	Ala	Thr	Thr
	210				215						220				
Ile	Arg	Asp	Ser	Lys	Arg	Cys	Arg	Glu	Arg	Asp	Phe	Leu	Lys	Lys	Val
225					230					235					240
His	Glu	Thr	Val	Glu	Arg	Gly	Gly	Lys	Val	Leu	Ile	Pro	Val	Phe	Ala
				245					250						255
Leu	Gly	Arg	Ala	Gln	Glu	Leu	Cys	Ile	Leu	Leu	Glu	Thr	Phe	Trp	Glu
			260					265						270	
Arg	Met	Asn	Leu	Lys	Val	Pro	Ile	Tyr	Phe	Ser	Thr	Gly	Leu	Thr	Glu
	275						280					285			
Lys	Ala	Asn	His	Tyr	Tyr	Lys	Leu	Phe	Ile	Pro	Trp	Thr	Asn	Gln	Lys
290					295						300				
Ile	Arg	Lys	Thr	Phe	Val	Gln	Arg	Asn	Met	Phe	Glu	Phe	Lys	His	Ile
305					310					315					320
Lys	Ala	Phe	Asp	Arg	Ala	Phe	Ala	Asp	Asn	Pro	Gly	Pro	Met	Val	Val
			325					330						335	
Phe	Ala	Thr	Pro	Gly	Met	Leu	His	Ala	Gly	Gln	Ser	Leu	Gln	Ile	Phe
			340					345					350		
Arg	Lys	Trp	Ala	Gly	Asn	Glu	Lys	Asn	Met	Val	Ile	Met	Pro	Gly	Tyr
	355						360					365			
Cys	Val	Gln	Gly	Thr	Val	Gly	His	Lys	Ile	Leu	Ser	Gly	Gln	Arg	Lys
370					375						380				
Leu	Glu	Met	Glu	Gly	Arg	Gln	Val	Leu	Glu	Val	Lys	Met	Gln	Val	Glu
385					390					395				400	
Tyr	Met	Ser	Phe	Ser	Ala	His	Ala	Asp	Ala	Lys	Gly	Ile	Met	Gln	Leu
				405				410						415	
Val	Gly	Gln	Ala	Glu	Pro	Glu	Ser	Val	Leu	Leu	Val	His	Gly	Glu	Ala
			420					425					430		
Lys	Lys	Met	Glu	Phe	Leu	Lys	Gln	Lys	Ile	Glu	Gln	Glu	Leu	Arg	Val
		435					440					445			
Asn	Cys	Tyr	Met	Pro	Ala	Asn	Gly	Glu	Thr	Val	Thr	Leu	Pro	Thr	Ser
450						455					460				
Pro	Ser	Ile	Pro	Val	Gly	Ile	Ser	Leu	Gly	Leu	Leu	Lys	Arg	Glu	Met
465					470					475				480	
Ala	Gln	Gly	Leu	Leu	Pro	Glu	Ala	Lys	Lys	Pro	Arg	Leu	Leu	His	Gly
			485					490						495	
Thr	Leu	Ile	Met	Lys	Asp	Ser	Asn	Phe	Arg	Leu	Val	Ser	Ser	Glu	Gln
			500					505					510		
Ala	Leu	Lys	Glu	Leu	Gly	Leu	Ala	Glu	His	Gln	Leu	Arg	Phe	Thr	Cys
		515					520					525			
Arg	Val	His	Leu	His	Asp	Thr	Arg	Lys	Glu	Gln	Glu	Thr	Ala	Leu	Arg
530						535					540				
Val	Tyr	Ser	His	Leu	Lys	Ser	Val	Leu	Lys	Asp	His	Cys	Val	Gln	His
545					550					555				560	
Leu	Pro	Asp	Gly	Ser	Val	Thr	Val	Glu	Ser	Val	Leu	Leu	Gln	Ala	Ala
			565					570						575	
Ala	Pro	Ser	Glu	Asp	Pro	Gly	Thr	Lys	Val	Leu	Leu	Val	Ser	Trp	Thr
			580					585					590		
Tyr	Gln	Asp	Glu	Glu	Leu	Gly	Ser	Phe	Leu	Thr	Ser	Leu	Leu	Lys	Lys
	595						600					605			
Gly	Leu	Pro	Gln	Ala	Pro	Ser									
	610					615									

<210> 3301

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3301

Cys Ile Arg Thr Glu Pro Ala Ala Ala Phe Arg Arg Leu Gly Ala Leu
 1 5 10 15
 Ser Gly Ala Ala Ala Leu Gly Phe Ala Ser Tyr Gly Ala His Gly Ala
 20 25 30
 Gln Phe Pro Asp Ala Tyr Gly Lys Glu Leu Phe Asp Lys Ala Asn Lys
 35 40 45
 His His Phe Leu His Ser Leu Ala Leu Leu Gly Val Pro His Cys Arg
 50 55 60
 Lys Pro Leu Trp Ala Gly Leu Leu Leu Ala Ser Gly Thr Thr Leu Phe
 65 70 75 80
 Cys Thr Ser Phe Tyr Tyr Gln Ala Leu Ser Gly Asp Pro Ser Ile Gln
 85 90 95
 Thr Leu Ala Pro Ala Gly Gly Thr Leu Leu Leu Gly Trp Leu Ala
 100 105 110
 Leu Ala Leu
 115

<210> 3302

<211> 375

<212> PRT

<213> Homo sapiens

<400> 3302

Leu Arg Arg Asn Cys Ser Ala Leu Gly Gly Leu Phe Gln Thr Ile Ile
 1 5 10 15
 Ser Asp Met Lys Gly Ser Tyr Pro Val Trp Glu Asp Phe Ile Asn Lys
 20 25 30
 Ala Gly Lys Leu Gln Ser Gln Leu Arg Thr Thr Val Val Ala Ala Ala
 35 40 45
 Ala Phe Leu Asp Ala Phe Gln Lys Val Ala Asp Met Ala Thr Asn Thr
 50 55 60
 Arg Gly Gly Thr Arg Glu Ile Gly Ser Ala Leu Thr Arg Met Cys Met
 65 70 75 80
 Arg His Arg Ser Ile Glu Ala Lys Leu Arg Gln Phe Ser Ser Ala Leu
 85 90 95
 Ile Asp Cys Leu Ile Asn Pro Leu Gln Glu Gln Met Glu Glu Trp Lys
 100 105 110
 Lys Val Ala Asn Gln Leu Asp Lys Asp His Ala Lys Glu Tyr Lys Lys
 115 120 125
 Ala Arg Gln Glu Ile Lys Lys Lys Ser Ser Asp Thr Leu Lys Leu Gln
 130 135 140
 Lys Lys Ala Lys Lys Gly Arg Gly Asp Ile Gln Pro Gln Leu Asp Ser
 145 150 155 160
 Ala Leu Gln Asp Val Asn Asp Lys Tyr Leu Leu Leu Glu Glu Thr Glu
 165 170 175
 Lys Gln Ala Val Arg Lys Ala Leu Ile Glu Glu Arg Gly Arg Phe Cys
 180 185 190
 Thr Phe Ile Ser Met Leu Arg Pro Val Ile Glu Glu Glu Ile Ser Met
 195 200 205
 Leu Gly Glu Ile Thr His Leu Gln Thr Ile Ser Glu Asp Leu Lys Ser
 210 215 220
 Leu Thr Met Asp Pro His Lys Leu Pro Ser Ser Ser Glu Gln Val Ile
 225 230 235 240
 Leu Asp Leu Lys Gly Ser Asp Tyr Ser Trp Ser Tyr Gln Thr Pro Pro
 245 250 255
 Ser Ser Pro Ser Thr Thr Met Ser Arg Lys Ser Ser Val Cys Ser Ser
 260 265 270
 Leu Asn Ser Val Asn Ser Ser Asp Ser Arg Ser Ser Gly Ser His Ser

```

      275              280              285
His Ser Pro Ser Ser His Tyr Arg Tyr Arg Ser Ser Asn Leu Ala Gln
      290              295              300
Gln Ala Pro Val Arg Leu Ser Ser Val Ser Ser His Asp Ser Gly Phe
305              310              315              320
Ile Ser Gln Asp Ala Phe Gln Ser Lys Ser Pro Ser Pro Met Pro Pro
      325              330              335
Glu Ala Pro Asn Gln Arg Arg Lys Glu Lys Arg Glu Pro Asp Pro Asn
      340              345              350
Gly Gly Gly Pro Thr Thr Ala Ser Gly Pro Pro Ala Ala Ala Glu Glu
      355              360              365
Ala Gln Arg Pro Arg Ser Met
      370              375

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<210> 3303
<211> 149
<212> PRT
<213> Homo sapiens

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```

<400> 3303
Ala Gly Arg Gly Gly Pro Gly Lys Pro Val Ser Trp Ser Ser Gly Pro
 1              5              10              15
Gly Ser Pro Gly Gln Thr Gln Arg Arg Ser Trp Val Lys Ser Thr Arg
      20              25              30
Gly His Ser Ser Leu Leu Pro Pro Ser Gln Asp Phe Val Ala Gly Leu
      35              40              45
Ser Val Ile Leu Arg Gly Thr Val Asp Asp Arg Leu Asn Trp Ala Phe
      50              55              60
Asn Leu Tyr Asp Leu Asn Lys Asp Gly Cys Ile Thr Lys Glu Glu Met
      65              70              75              80
Leu Asp Ile Met Lys Ser Ile Tyr Asp Met Met Gly Lys Tyr Thr Tyr
      85              90              95
Pro Ala Leu Arg Glu Glu Ala Pro Arg Glu His Val Glu Ser Phe Phe
      100              105              110
Gln Lys Met Asp Arg Asn Lys Asp Gly Val Val Thr Ile Glu Glu Phe
      115              120              125
Ile Glu Ser Cys Gln Lys Asp Glu Asn Ile Met Arg Ser Met Gln Leu
      130              135              140
Phe Asp Asn Val Ile
145              149

```

```

<210> 3304
<211> 131
<212> PRT
<213> Homo sapiens

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```

<221> misc_feature
<222> (1)...(130)
<223> Xaa = any amino acid or nothing

```

```

<400> 3304
Ile Ser Glu Ala Ala Ser Gly Ala Phe Gln Ala Arg Xaa Phe Tyr Gln
 1              5              10              15
Met Leu Glu Gln Lys Thr Asp Ala Leu Gly Lys Gln Ser Val Asn Arg
      20              25              30
Gly Phe Thr Lys Asp Lys Thr Leu Ser Ser Ile Phe Asn Ile Glu Met
      35              40              45
Val Lys Glu Lys Thr Ala Glu Glu Ile Lys Gln Ile Trp Gln Gln Tyr

```

```

      50              55              60
Phe Ala Ala Lys Asp Thr Val Tyr Ala Val Ile Pro Ala Glu Lys Phe
65              70              75              80
Asp Leu Ile Trp Asn Arg Ala Gln Ser Cys Pro Thr Phe Leu Cys Ala
      85              90              95
Leu Pro Arg Arg Glu Gly Tyr Glu Phe Phe Val Gly Gln Trp Thr Gly
      100              105              110
Thr Glu Leu His Phe His Cys Thr Tyr Lys Tyr Ser Asp Pro Glu Gly
      115              120              125
Lys Ala
130

```

```

<210> 3305
<211> 161
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(160)
<223> Xaa = any amino acid or nothing

```

```

      <400> 3305
Leu Asp Ala Cys Ser Thr Gly Pro Tyr Ser Arg Ser Thr His Ala Ser
1              5              10              15
Ala Asp Ala Trp Ala Asp Ala Trp Val Val Val Val Leu Lys Val Val
      20              25              30
Gly Met Thr Leu Phe Leu Leu Tyr Phe Pro Gln Ile Phe Asn Lys Ser
      35              40              45
Asn Asp Gly Phe Thr Thr Thr Arg Ser Tyr Gly Thr Val Ser Gln Ile
      50              55              60
Phe Gly Ser Arg Ser Pro Ser Pro Asn Gly Phe Ile Thr Thr Arg Ser
      65              70              75              80
Tyr Gly Thr Val Cys Pro Lys Asp Trp Glu Phe Tyr Gln Ala Arg Cys
      85              90              95
Phe Phe Leu Ile His Leu Xaa Ser Ser Trp Asn Glu Ser Trp Asp Phe
      100              105              110
Cys Lys Gly Lys Gly Cys Thr Leu Ala Ile Val Asp Asn Ser Glu Thr
      115              120              125
Leu Lys Leu Leu His Asp Leu His Asp Ala Glu Lys Asn Tyr Ile Ala
      130              135              140
Leu Pro Tyr Arg Ser Ser Lys Tyr Met Ser Thr Cys Asn Gly Thr Phe
145              150              155              160

```

```

<210> 3306
<211> 291
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(290)
<223> Xaa = any amino acid or nothing

```

```

      <400> 3306
Thr Leu Ser Ser Ala Cys Leu Ile Gly Asp Ala Trp Lys Glu Leu Thr
1              5              10              15
Ile Val Ala Gly Ala Val Ser Asn Gln Leu Leu Val Trp Tyr Pro Ala

```

```

      20      25      30
Thr Ala Leu Ala Asp Asn Lys Pro Val Ala Pro Asp Arg Arg Ile Ser
      35      40      45
Gly His Val Gly Ile Ile Phe Ser Met Ser Tyr Leu Glu Ser Lys Gly
      50      55      60
Leu Leu Ala Thr Ala Ser Glu Asp Arg Ser Val Arg Ile Trp Lys Gly
      65      70      75      80
Gly Asp Leu Arg Val Pro Gly Gly Arg Val Gln Asn Ile Gly His Cys
      85      90      95
Phe Gly His Ser Ala Arg Val Trp Gln Val Lys Leu Leu Glu Asn Tyr
      100      105      110
Leu Ile Ser Ala Gly Glu Asp Cys Val Cys Leu Val Trp Ser His Glu
      115      120      125
Gly Glu Ile Leu Gln Ala Phe Arg Gly His Gln Gly Arg Gly Ile Arg
      130      135      140
Ala Ile Ala Ala His Glu Arg Gln Ala Trp Val Ile Thr Gly Gly Asp
      145      150      155      160
Asp Ser Gly Ile Arg Leu Trp His Leu Val Gly Arg Gly Tyr Arg Gly
      165      170      175
Leu Gly Asp Leu Gly Ser Leu Leu Gln Val Pro Xaa Xaa Ala Arg Tyr
      180      185      190
Thr Gln Gly Cys Asp Ser Gly Trp Leu Leu Ala Thr Ala Gly Ser Asp
      195      200      205
Xaa Tyr Arg Gly Pro Val Ser Leu Xaa Arg Arg Gly Gln Val Leu Gly
      210      215      220
Ala Ala Ala Arg Gly Xaa Thr Phe Pro Val Leu Leu Pro Ala Gly Gly
      225      230      235      240
Ser Ser Trp Ser Arg Gly Leu Arg Ile Val Cys Tyr Gly Gln Trp Gly
      245      250      255
Arg Ser Cys Gln Gly Cys Pro His Gln His Ser Asn Cys Cys Cys Gly
      260      265      270
Pro Asp Pro Val Ser Trp Glu Gly Ala Gln Leu Glu Leu Gly Pro Ala
      275      280      285
Trp Leu
      290

```

<210> 3307

<211> 309

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(308)

<223> Xaa = any amino acid or nothing

<400> 3307

```

      1      5      10      15
Arg Thr Ser Arg Val Glu Lys Gly Leu Arg Lys Ala Gly Ala Ala Val
      20      25      30
Thr Met Glu Ser Asp Glu Trp Phe Ser Gln Ala Leu Pro Ala Asn Thr
      35      40      45
Ser Ala Gln Lys Ala Glu Leu Ile Ala Leu Thr Gln Ala Ile Arg Trp
      50      55      60
Gly Lys Asp Ile Asn Val Asn Thr Asp Ser Arg Tyr Ala Phe Ala Thr
      65      70      75      80
Val His Val Arg Gly Ala Ile Cys Gln Glu Arg Arg Leu Leu Thr Ser
      85      90      95
Ala Glu Lys Ala Ile Lys Asn Lys Asn Pro Pro Ser Ser Lys Pro Asn
      100      105      110
Arg Ser Ser Ser Phe Trp Gly Thr Thr Cys Asp Gln Val Asn Ala Lys
      115      120
Gln Gly Pro Lys Pro Ser Pro Gly His Arg Leu Arg Arg Asn Leu Pro

```

115	120	125
Gly Glu Lys Trp	Glu Ile Asp Phe Thr Lys Val	Lys Pro His Gln Ala
130	135	140
Gly Tyr Lys Tyr	Leu Leu Val Leu Val Asp Thr	Phe Ser Gly Trp Thr
145	150	155
Glu Ala Phe Ala	Thr Lys Asn Glu Thr Val Asn Met	Val Val Lys Phe
165	170	175
Leu Leu Asn Glu	Ile Ile Pro Arg His Gly Leu Pro	Val Ala Ile Gly
180	185	190
Ser Asp Asn Gly	Pro Ala Phe Ala Leu Ser Ile Val	Xaa Ser Val Ser
195	200	205
Lys Ala Leu Asn	Ile Gln Trp Lys Leu His Cys Ala	Tyr Arg Pro Gln
210	215	220
Ser Ser Gly Gln	Val Glu Arg Met Asn Cys Thr Leu	Lys Asn Thr Leu
225	230	235
Thr Lys Leu Ile	Leu Glu Thr Gly Val Asn Trp	Val Ser Leu Leu Pro
245	250	255
Leu Ala Leu Leu	Arg Val Arg Cys Thr Pro Tyr Trp	Ala Gly Phe Leu
260	265	270
Pro Phe Glu Ile	Met Tyr Gly Arg Val Leu Pro	Ile Leu Pro Lys Leu
275	280	285
Arg Asp Ala Gln	Leu Ala Lys Ile Ser Gln Thr	Asn Leu Leu Gln Tyr
290	295	300
Leu Gln Ser Pro		
305	308	

<210> 3308
 <211> 196
 <212> PRT
 <213> Homo sapiens

<400> 3308
Asn Ser Pro Ser Leu Asp Phe Asn Asp Asn Glu Asp Ile Pro Thr Glu
1 5 10 15
Leu Ser Asp Ser Ser Asp Thr His Asp Glu Gly Glu Val Gln Ala Phe
20 25 30
Tyr Glu Asp Leu Ser Gly Arg Gln Tyr Val Asn Glu Val Phe Asn Phe
35 40 45
Ser Val Asp Lys Leu Tyr Asp Leu Leu Phe Thr Asn Ser Pro Phe Gln
50 55 60
Arg Asp Phe Met Glu Gln Arg Arg Phe Ser Asp Ile Ile Phe His Pro
65 70 75 80
Trp Lys Lys Glu Glu Asn Gly Asn Gln Ser Arg Val Ile Pro Tyr Thr
85 90 95
Ile Thr Leu Thr Asn Pro Leu Glu His Lys Thr Ala Thr Val Arg Glu
100 105 110
Thr Gln Thr Met Tyr Lys Ala Ser Gln Glu Ser Glu Cys Tyr Val Ile
115 120 125
Asp Ala Glu Val Leu Thr His Asp Val Pro Tyr His Asp Tyr Phe Tyr
130 135 140
Thr Ile Asn Arg Tyr Thr Leu Thr Arg Val Ala Arg Asn Lys Ser Arg
145 150 155 160
Leu Arg Val Ser Thr Glu Leu Arg Tyr Arg Lys Gln Pro Trp Gly Leu
165 170 175
Val Lys Thr Phe Ile Glu Lys Asn Phe Trp Ser Gly Leu Glu Asp Tyr
180 185 190
Phe Arg His Leu
195 196

<210> 3309
 <211> 196
 <212> PRT
 <213> Homo sapiens

<400> 3309
 Asn Ser Pro Ser Leu Asp Phe Asn Asp Asn Glu Asp Ile Pro Thr Glu
 1 5 10 15
 Leu Ser Asp Ser Asp Thr His Asp Glu Gly Glu Val Gln Ala Phe
 20 25 30
 Tyr Glu Asp Leu Ser Gly Arg Gln Tyr Val Asn Glu Val Phe Asn Phe
 35 40 45
 Ser Val Asp Lys Leu Tyr Asp Leu Leu Phe Thr Asn Ser Pro Phe Gln
 50 55 60
 Arg Asp Phe Met Glu Gln Arg Arg Phe Ser Asp Ile Ile Phe His Pro
 65 70 75 80
 Trp Lys Lys Glu Glu Asn Gly Asn Gln Ser Arg Val Ile Pro Tyr Thr
 85 90 95
 Ile Thr Leu Thr Asn Pro Leu Glu His Lys Thr Ala Thr Val Arg Glu
 100 105 110
 Thr Gln Thr Met Tyr Lys Ala Ser Gln Glu Ser Glu Cys Tyr Val Ile
 115 120 125
 Asp Ala Glu Val Leu Thr His Asp Val Pro Tyr His Asp Tyr Phe Tyr
 130 135 140
 Thr Ile Asn Arg Tyr Thr Leu Thr Arg Val Ala Arg Asn Lys Ser Arg
 145 150 155 160
 Leu Arg Val Ser Thr Glu Leu Arg Tyr Arg Lys Gln Pro Trp Gly Leu
 165 170 175
 Val Lys Thr Phe Ile Glu Lys Asn Phe Trp Ser Gly Leu Glu Asp Tyr
 180 185 190
 Phe Arg His Leu
 195 196

<210> 3310
 <211> 400
 <212> PRT
 <213> Homo sapiens

<221> misc_feature
 <222> (1)...(399)
 <223> Xaa = any amino acid or nothing

<400> 3310
 Ser Pro Leu Cys His Pro Gly Leu Ser Arg Glu Arg Ser Xaa Ser Glu
 1 5 10 15
 Ala Lys Leu Arg Ser Gly Arg Tyr Cys Xaa Lys Arg Gln Val Glu Ala
 20 25 30
 Pro Leu Xaa Arg Pro Gly Leu Xaa Thr Met Ala Ala Ser Asp Thr Glu
 35 40 45
 Arg Asp Gly Leu Ala Pro Glu Lys Thr Ser Pro Asp Arg Asp Lys Lys
 50 55 60
 Lys Glu Gln Ser Glu Val Ser Val Ser Pro Arg Ala Ser Lys His His
 65 70 75 80
 Tyr Ser Arg Ser Arg Ser Arg Ser Arg Glu Arg Lys Arg Lys Ser Asp
 85 90 95
 Asn Glu Gly Arg Lys His Arg Ser Arg Ser Arg Ser Lys Glu Gly Arg
 100 105 110
 Arg His Glu Ser Lys Asp Lys Ser Ser Lys Lys His Lys Ser Glu Glu
 115 120 125
 His Asn Asp Lys Glu His Ser Ser Asp Lys Gly Arg Glu Arg Leu Asn

```

      130              135              140
Ser Ser Glu Asn Gly Glu Asp Arg His Lys Arg Lys Glu Arg Lys Ser
145              150              155              160
Ser Arg Gly Arg Ser His Ser Arg Ser Arg Ser Arg Glu Arg Arg His
      165              170              175
Arg Ser Arg Ser Arg Glu Arg Lys Lys Ser Arg Ser Arg Ser Arg Glu
      180              185              190
Arg Lys Lys Ser Arg Ser Arg Ser Arg Glu Arg Lys Lys Ser Arg Ser
      195              200              205
Arg Ser Arg Glu Arg Lys Arg Arg Ile Arg Ser Arg Ser Arg Ser Arg
      210              215              220
Ser Arg His Arg His Arg Thr Arg Ser Arg Ser Arg Thr Arg Ser Arg
225              230              235              240
Ser Arg Asp Arg Lys Lys Arg Ile Glu Lys Pro Arg Arg Phe Ser Arg
      245              250              255
Ser Leu Ser Arg Thr Pro Ser Pro Pro Phe Arg Gly Arg Asn Thr
      260              265              270
Ala Met Asp Ala Gln Glu Ala Leu Ala Arg Arg Leu Glu Arg Ala Lys
      275              280              285
Lys Leu Gln Glu Gln Arg Glu Lys Glu Met Val Glu Lys Gln Lys Gln
      290              295              300
Gln Glu Ile Ala Ala Ala Ala Ala Thr Gly Gly Ser Val Leu Asn
305              310              315              320
Val Ala Ala Leu Leu Ala Ser Gly Thr Gln Val Thr Pro Gln Ile Ala
      325              330              335
Met Ala Ala Gln Met Ala Ala Leu Gln Ala Lys Ala Leu Ala Glu Thr
      340              345              350
Gly Ile Ala Val Pro Ser Tyr Tyr Asn Pro Ala Ala Val Asn Pro Met
      355              360              365
Lys Phe Ala Glu Gln Glu Lys Lys Arg Lys Met Leu Trp Gln Gly Lys
      370              375              380
Lys Glu Gly Asp Lys Ser Gln Ser Ala Gly Asn Met Gly Lys Asn
385              390              395              399

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<210> 3311
<211> 58
<212> PRT
<213> Homo sapiens

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```

<400> 3311
Pro Ile Gln Ile Pro Pro Arg Ile Thr Pro Pro Arg Pro Ser Pro His
 1              5              10              15
Leu Leu Thr Pro Arg Thr Gly Ser Ser Pro Pro Pro Pro Arg Ala Pro
      20              25              30
Ser Pro Pro His Pro Thr Pro Gly Pro Ala His Asp Phe Pro Pro Leu
      35              40              45
Ser Ala Val Leu Ser Gly His Thr Lys Thr
      50              55              58

```

```

<210> 3312
<211> 144
<212> PRT
<213> Homo sapiens

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```

<221> misc_feature
<222> (1)...(141)
<223> Xaa = any amino acid or nothing

```

<400> 3312

```

Leu Glu Ser Pro Arg His Xaa Pro Pro Cys Trp Gly Pro Leu Ile Trp
 1           5           10           15
Ala Leu Thr Val Ser Ser Val Pro Ser Pro Thr Pro Glu Leu Ser Cys
          20           25           30
Ile Leu Lys Ser Pro Arg Pro Ala Cys Pro Val Pro Gly Leu Trp Pro
          35           40           45
Ser Leu Leu Ser Pro Ala Pro Pro Gln Ser Ser Gly Pro Leu Leu Gly
          50           55           60
Leu Ser Pro Cys Pro Gly Ala Gly Gln Trp Pro Ser Pro Leu Ser Pro
          65           70           75           80
Ala Pro Pro Pro Ser Ser Asp Pro Leu Ser Gly Leu Ser Pro Cys Pro
          85           90           95
Gly Ala Gly Pro Arg Ser Ser Pro Ser Ala Ser Ala Pro Cys Arg Ala
          100          105          110
Val Pro Leu Ser Pro Arg Arg Leu Thr Trp Pro Pro His Leu Gln Val
          115          120          125
Gly Ile Leu Ile Pro Thr Gly Arg Pro Trp Lys Asn Leu
          130          135          140 141

```

<210> 3313

<211> 54

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(53)

<223> Xaa = any amino acid or nothing

<400> 3313

```

Gln Leu Gln Asn Leu Ala Ser Arg Gly Cys Leu Xaa Ser Gln Leu Leu
 1           5           10           15
Arg Arg Leu Arg Arg Glu Asn Arg Leu Asn Pro Gly Gly Gly Gly Cys
          20           25           30
Ser Glu Ile Ala Pro Cys Thr Pro Ala Trp Val Thr Gln Arg Asp Phe
          35           40           45
Phe Arg Lys Lys Lys
          50           53

```

<210> 3314

<211> 54

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(53)

<223> Xaa = any amino acid or nothing

<400> 3314

```

Gln Leu Gln Asn Leu Ala Ser Arg Gly Cys Leu Xaa Ser Gln Leu Leu
 1           5           10           15
Arg Arg Leu Arg Arg Glu Asn Arg Leu Asn Pro Gly Gly Gly Gly Cys
          20           25           30
Ser Glu Ile Ala Pro Cys Thr Pro Ala Trp Val Thr Gln Arg Asp Phe
          35           40           45
Phe Arg Lys Lys Lys
          50           53

```


<210> 3315
 <211> 156
 <212> PRT
 <213> Homo sapiens

<221> misc_feature
 <222> (1)...(155)
 <223> Xaa = any amino acid or nothing

<400> 3315
 Pro Arg Lys Arg Glu Ser Trp Trp Gly Glu Arg Leu Pro Pro Arg Gly
 1 5 10 15
 Phe Pro Pro Ala Ala Glu Asp Ala Pro Ala Pro Gly Trp Lys Gly Arg
 20 25 30
 Lys His Ala Ser Arg Thr Ala Arg Ala His Val Phe His Pro Ile Arg
 35 40 45
 Gln Ser Ile Arg Ser Pro Val Arg Gly Arg Pro Gly Asp Pro Arg Ala
 50 55 60
 Ala His Thr Arg Ser Ala Gly Thr Arg Leu Gln Cys Lys Ala Ser Arg
 65 70 75 80
 Gly Gly Xaa Gly Lys Gly Pro Ala Pro Thr Arg Xaa Glu Gly Gly Pro
 85 90 95
 Gly Ser Ala Pro Ala Pro Leu Pro Ala Ser Ser Gly Cys Ser Leu Phe
 100 105 110
 Pro Asp Ser Ser Pro Trp Thr Pro Pro Pro Ala Pro Gly Ala Ala
 115 120 125
 Ala Ala Gln Pro Xaa Xaa Thr Pro Arg Cys Pro Ala Ala Leu Arg Ala
 130 135 140
 Gly Ala His Ile Gly Arg Val Gly Arg Pro Tyr
 145 150 155

<210> 3316
 <211> 769
 <212> PRT
 <213> Homo sapiens

<400> 3316
 Asn His Leu Gly Thr Leu Met Gln Asn Trp Asp Ser Ser Ser Arg Val
 1 5 10 15
 Pro Phe Ser Ser Gly Gln His Ser Thr Gln Ser Phe Pro Pro Ser Leu
 20 25 30
 Met Ser Lys Ser Asn Ser Met Leu Gln Lys Pro Thr Ala Tyr Val Arg
 35 40 45
 Pro Met Asp Gly Gln Glu Ser Met Glu Pro Lys Leu Ser Ser Glu His
 50 55 60
 Tyr Ser Ser Gln Ser His Gly Asn Ser Met Thr Glu Leu Lys Pro Ser
 65 70 75 80
 Ser Lys Ala His Leu Thr Lys Leu Lys Ile Pro Ser Gln Pro Leu Asp
 85 90 95
 Ala Ser Ala Ser Gly Asp Val Ser Cys Val Asp Glu Ile Leu Lys Glu
 100 105 110
 Met Thr His Ser Trp Pro Pro Pro Leu Thr Ala Ile His Thr Pro Cys
 115 120 125
 Lys Thr Glu Pro Ser Lys Phe Pro Phe Pro Thr Lys Glu Ser Gln Gln
 130 135 140
 Ser Asn Phe Gly Thr Gly Glu Gln Lys Arg Tyr Asn Pro Ser Lys Thr
 145 150 155 160
 Ser Asn Gly His Gln Ser Lys Ser Met Leu Lys Asp Asp Leu Lys Leu

5003

675	680	685
Ser Lys Pro Arg Arg Thr Lys Leu Val Phe Asp Asp Arg Asn Tyr Ser		
690	695	700
Ala Asp His Tyr Leu Gln Glu Ala Lys Lys Leu Lys His Asn Ala Asp		
705	710	715
Ala Leu Ser Asp Arg Phe Glu Lys Ala Val Tyr Tyr Leu Asp Ala Val		
	725	730
Val Ser Phe Ile Glu Cys Gly Asn Ala Leu Glu Lys Asn Ala Gln Glu		
	740	745
Ser Lys Ser Pro Phe Pro Met Tyr Ser Glu Thr Val Asp Leu Ile		
755	760	765 767

<210> 3317
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 3317

Asn Leu Leu Gln Asp Glu Lys Leu Val His Ser Tyr Pro Tyr Asp Trp	
1 5 10 15	
Arg Thr Gln Glu Thr Cys Gly Tyr Ile Val Pro Ala Arg Gln Trp Phe	
20 25 30	
Ile Asn Thr Arg Asp Ile Lys Thr Ala Ala Lys Glu Leu Leu Lys Lys	
35 40 45	
Val Lys Phe Ile Pro Gly Ser Ala Leu Asn Gly Met Val Glu Met Met	
50 55 60	
Asp Arg Arg Pro Tyr Trp Cys Ile Ser Arg Gln Arg Val Trp Gly Val	
65 70 75 80	
Pro Ile Pro Val Phe His His Lys Thr Lys Asp Glu Tyr Leu Ile Asn	
85 90 95	
Ser Gln Thr Thr Glu His Ile Val Lys Leu Val Glu Gln His Gly Ser	
100 105 110	
Asp Ile Trp Trp Thr Leu Pro Pro Glu Gln Leu Leu Pro Lys Glu Val	
115 120 125	
Leu Ser Glu Val Gly Gly Pro Asp Ala Leu Glu Tyr Val Pro Gly Gln	
130 135 140	
Asp Ile Leu Asp Ile Trp Phe Asp Ser Gly Thr Ser Trp Ser Tyr Val	
145 150 155 160	
Leu Pro Gly Pro Asp	
165	

<210> 3318
 <211> 171
 <212> PRT
 <213> Homo sapiens

<400> 3318

Ala Trp His Glu Gly Asp Ser Arg Ser Asp Gln Cys His His Pro Tyr	
1 5 10 15	
Asn Tyr Gly Phe Asp Tyr Tyr Tyr Gly Met Pro Phe Thr Leu Val Asp	
20 25 30	
Ser Cys Trp Pro Asp Pro Ser Arg Asn Thr Glu Leu Ala Phe Glu Ser	
35 40 45	
Gln Leu Trp Leu Cys Val Gln Leu Val Ala Ile Ala Ile Leu Thr Leu	
50 55 60	
Thr Phe Gly Lys Leu Ser Gly Trp Val Ser Val Pro Trp Leu Leu Ile	
65 70 75 80	
Phe Ser Met Ile Leu Phe Ile Phe Leu Leu Gly Tyr Ala Trp Phe Ser	

```

      85              90              95
Ser His Thr Ser Pro Leu Tyr Trp Asp Cys Leu Leu Met Arg Gly His
      100              105              110
Glu Ile Thr Glu Gln Pro Met Lys Ala Glu Arg Ala Gly Ser Ile Met
      115              120              125
Val Lys Glu Ala Ile Phe Leu Phe Arg Lys Gly His Ser Lys Gly Lys
      130              135              140
Leu Phe Leu Leu Phe Phe Leu Pro Phe Leu Gln Val His Lys Thr Phe
      145              150              155              160
Pro Thr Thr Asp Gly Phe His Trp Ala Pro
      165              170

```

<210> 3319
 <211> 137
 <212> PRT
 <213> Homo sapiens

```

<400> 3319
Ser Ser Leu His Arg Ser Pro Arg Pro Ala Ser Pro Leu Pro Val Pro
  1              5              10              15
Glu Ala Pro Ser Phe Leu Pro Val Pro Ala Pro Lys Pro Ser Ala Leu
      20              25              30
Pro Pro Phe Ser Leu Ser Gly Ala Pro Ser Ser Ala Ser Thr Phe Ser
      35              40              45
Pro His Ser Ser Pro Ser Pro Ala Ser Pro Thr Pro Ala Pro Ser Pro
      50              55              60
Gln Ser Pro Phe Pro Ser Arg Pro Thr Ser Pro Pro Ser Leu Thr Pro
      65              70              75              80
Thr Arg Arg Pro Pro Leu Pro Ala Asp Arg Arg Gly Pro His Leu Leu
      85              90              95
Tyr Gln Pro Leu His Ala Pro Leu Glu Ala Ala Ala Thr Gly Pro Glu
      100              105              110
Pro Ser Ala Ala Ala Gly Arg Leu Pro Arg Pro Arg Pro Pro Trp Arg
      115              120              125
Ala Ala Tyr Pro Ala Ser Arg
      130              135

```

<210> 3320
 <211> 202
 <212> PRT
 <213> Homo sapiens

```

<400> 3320
Gln Met Ser Glu Ala Val Ala Glu Lys Met Leu Gln Tyr Arg Arg Asp
  1              5              10              15
Thr Ala Gly Trp Lys Ile Cys Arg Glu Gly Asn Gly Val Ser Val Ser
      20              25              30
Trp Arg Pro Ser Val Glu Phe Pro Gly Asn Leu Tyr Arg Gly Glu Gly
      35              40              45
Ile Val Tyr Gly Thr Leu Glu Glu Val Trp Asp Cys Val Lys Pro Ala
      50              55              60
Val Gly Gly Leu Arg Val Lys Trp Asp Glu Asn Val Thr Gly Phe Glu
      65              70              75              80
Ile Ile Gln Ser Ile Thr Asp Thr Leu Cys Val Ser Arg Thr Ser Thr
      85              90              95
Pro Ser Ala Ala Met Lys Leu Ile Ser Pro Arg Asp Phe Val Asp Leu
      100              105              110
Val Leu Val Lys Arg Tyr Glu Asp Gly Thr Ile Ser Ser Asn Ala Thr

```

```

      115      120      125
His Val Glu His Pro Leu Cys Pro Pro Lys Pro Gly Phe Val Arg Gly
      130      135      140
Phe Asn His Pro Cys Gly Cys Phe Cys Glu Pro Leu Pro Gly Glu Pro
145      150      155      160
Thr Lys Thr Asn Leu Val Thr Phe Phe His Thr Asp Leu Ser Gly Tyr
      165      170      175
Leu Pro Gln Asn Val Val Asp Ser Phe Phe Pro Arg Ser Met Thr Arg
      180      185      190
Phe Tyr Ala Asn Leu Gln Lys Ala Val Lys
      195      200      202

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<210> 3321
<211> 108
<212> PRT
<213> Homo sapiens

```

```

<400> 3321
Ser His Ser Ala Ser Gly Ala Gly Arg Pro Ala Ala Pro Ala Ala Asp
 1      5      10      15
Leu Arg Pro Ala Pro Asn Gly Gln Arg Pro Gly Pro Arg Leu Gly Ala
      20      25      30
Arg Ala Leu Trp Leu Pro Pro Arg Gly Arg Pro Asp Glu Ala Gly Arg
      35      40      45
Leu Pro Gly Glu His Leu Pro Gln Val Pro Trp Asp Pro Gly Leu Thr
      50      55      60
Arg Ser Pro Ser Pro Arg Gly Pro Cys Arg Gly Ala Ala Arg Ala Gly
      65      70      75      80
His Val Gly Glu Thr Pro Ala Pro Trp Gly Cys Pro Pro Pro Cys Ala
      85      90      95
Trp Glu His Lys Gly Pro Gly Ser Glu Gly Thr Pro
      100      105      108

```

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<210> 3322
<211> 140
<212> PRT
<213> Homo sapiens

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<221> misc_feature
<222> (1)...(140)
<223> Xaa = any amino acid or nothing

```

```

<400> 3322
Ala Ile Val Glu Asp Lys His Ser Gly Arg Ser Tyr Asp Ile Thr Ser
 1      5      10      15
Asp Leu Gly Asn Val Leu Thr Ser Thr Ser Ile Ala Lys Thr Val Asn
      20      25      30
Gly Xaa Ala Glu Ser Ser Asp Ser Gly Ala Glu Ser Asp Glu Glu Asp
      35      40      45
Ala Gln Glu Asp Leu Met Gly Ala Tyr His Ser Asp Ile Asp Lys Lys
      50      55      60
Met Met Lys Ile Val Ala Asp His Lys Asn Leu Glu Val Ile Val Thr
      65      70      75      80
Asn Gly Tyr Asp Lys Asp Gly Phe Val His Asp Ile Gln Asn Asp Ile
      85      90      95
His Ala Ser Ser Ser Leu Asn Gly Arg Ser Thr Val His Val Lys Pro
      100      105      110
Ile Asp Glu Asn Leu Gly Gln Thr Gly Lys Ser Ala Val Cys Ile His

```

5007

```

      100      105      110
Ser Ala Pro Ser Trp Pro Ser Leu Val Asp Thr Ser Lys Gln Trp Asp
      115      120      125
Tyr Tyr Ala Arg Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser
      130      135      140
Ser Ser Ser Pro Arg Asp Arg Asp Arg Glu Arg Xaa Arg Thr Arg Glu
145      150      155      160
Arg Glu Arg Glu Arg Asp His Ser Pro Thr Pro Ser Val Phe Asn Ser
      165      170      175
Asp Glu Glu Arg Tyr Arg Tyr Arg Glu Tyr Ala Glu Arg Gly Tyr Glu
      180      185      190
Arg His Arg Ala Ser Arg Glu Lys Glu Glu Arg His Arg Glu Arg Arg
      195      200      205
His Arg Glu Lys Glu Glu Thr Arg His Lys Ser Ser Arg Ser Asn Ser
      210      215      220
Arg Arg Arg His Glu Ser Glu Glu Gly Asp Ser His Arg Arg His Lys
225      230      235      240
His Lys Lys Ser Lys Arg Ser Lys Glu Gly Lys Glu Ala Gly Ser Glu
      245      250      255
Pro Ala Pro Glu Gln Glu Ser Thr Glu Ala Thr Pro Ala Glu
      260      265      270

```

<210> 3325

<211> 1015

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(1015)

<223> Xaa = any amino acid or nothing

<400> 3325

```

Thr Cys Leu Phe Ser Ala Ser Cys Ser Ser Leu Pro Ser Pro Ser Ser
 1      5      10      15
Ser Phe Ala Leu Leu Ser Thr Glu Asn Thr Gln Arg Thr Tyr Arg Val
      20      25      30
Asn Pro Asp Gly Ser Leu Arg Val Thr Phe Ala Ser Gly Met Glu Ile
      35      40      45
Gly Leu Ser Ser Glu Pro His Ile Leu Ala Gly Ala Val Asn Pro Thr
      50      55      60
Leu Gly Lys Cys Asn Ile Ser Leu Pro Gly Glu His Asn Ala Asn Leu
      65      70      75      80
Ile Ser Val Leu Xaa Xaa Gly Glu Gln Gly Cys Ala Xaa Asn Val Phe
      85      90      95
His Ile Ser Phe Ser Xaa Ala His Asn Arg Asn Leu Leu Ser Ile Asp
      100      105      110
Phe Asp His Ile Thr Arg Thr Gly Lys Ile Tyr Asp Asp His Arg Lys
      115      120      125
Phe Thr Leu Arg Ile Leu Tyr Asp Gln Thr Gly Arg Pro Ile Leu Trp
      130      135      140
Ser Pro Val Ser Arg Tyr Asn Glu Val Asn Ile Thr Tyr Ser Pro Ser
145      150      155      160
Gly Leu Val Thr Phe Ile Gln Arg Gly Thr Trp Asn Glu Lys Met Glu
      165      170      175
Tyr Asp Gln Ser Phe Leu Xaa Ser Pro Gln Leu Xaa Leu Ser Ile Ile
      180      185      190
Cys Tyr Ser Ala Phe Val Ser Phe Gln Ser Val Met Leu Leu Leu His
      195      200      205
Ser Gln Arg Arg Tyr Ile Phe Glu Tyr Asp Gln Pro Asp Cys Leu Leu
      210      215      220
Ser Val Thr Met Pro Ser Met Val Arg His Ser Leu Gln Thr Met Leu

```

225					230					235				240	
Ser	Val	Gly	Tyr	Tyr	Arg	Asn	Ile	Tyr	Thr	Pro	Pro	Asp	Ser	Ser	Thr
				245					250					255	
Ser	Phe	Ile	Gln	Asp	Tyr	Ser	Arg	Asp	Gly	Arg	Leu	Leu	Gln	Thr	Leu
			260					265					270		
His	Leu	Gly	Thr	Gly	Arg	Arg	Val	Leu	Tyr	Lys	Tyr	Thr	Lys	Gln	Ala
		275					280					285			
Arg	Leu	Ser	Glu	Val	Leu	Tyr	Asp	Thr	Thr	Gln	Val	Thr	Leu	Thr	Tyr
	290					295					300				
Glu	Glu	Ser	Ser	Gly	Asp	Leu	Ser	Asp	Ser	Ser	Thr	Leu	Ile	Ala	Xaa
305					310					315				320	
Leu	Leu	Thr	Val	Phe	Val	Leu	Val	Pro	Ala	Gly	Pro	Leu	Ile	Gly	Arg
				325					330					335	
Gln	Ile	Phe	Arg	Phe	Ser	Glu	Glu	Gly	Leu	Val	Asn	Ala	Arg	Phe	Asp
			340					345					350		
Tyr	Ser	Tyr	Asn	Asn	Phe	Arg	Val	Thr	Ser	Met	Gln	Ala	Val	Ile	Asn
	355						360					365			
Glu	Thr	Pro	Leu	Pro	Ile	Asp	Leu	Tyr	Arg	Tyr	Val	Asp	Val	Ser	Gly
	370					375					380				
Arg	Thr	Glu	Gln	Phe	Gly	Lys	Phe	Ser	Val	Ile	Asn	Tyr	Asp	Leu	Asn
385					390						395			400	
Gln	Val	Ile	Thr	Thr	Val	Met	Lys	His	Thr	Lys	Ile	Phe	Ser	Ala	
				405				410						415	
Asn	Gly	Gln	Val	Ile	Glu	Val	Gln	Tyr	Glu	Ile	Leu	Lys	Ala	Ile	Ala
			420					425					430		
Tyr	Trp	Met	Thr	Ile	Gln	Tyr	Asp	Asn	Val	Gly	Arg	Met	Val	Ile	Cys
	435					440						445			
Asp	Ile	Arg	Val	Gly	Val	Asp	Ala	Asn	Ile	Thr	Arg	Tyr	Phe	Tyr	Glu
	450					455					460				
Tyr	Asp	Ala	Asp	Gly	Gln	Leu	Gln	Thr	Val	Ser	Val	Asn	Asp	Lys	Thr
465					470					475				480	
Gln	Trp	Arg	Tyr	Ser	Tyr	Asp	Leu	Asn	Gly	Asn	Ile	Asn	Leu	Leu	Ser
				485					490					495	
His	Gly	Lys	Ser	Ala	Arg	Leu	Thr	Pro	Leu	Arg	Tyr	Asp	Leu	Arg	Asp
			500					505					510		
Arg	Ile	Thr	Arg	Leu	Gly	Glu	Ile	Gln	Tyr	Lys	Met	Asp	Glu	Asp	Gly
	515						520					525			
Phe	Leu	Arg	Gln	Arg	Gly	Asn	Asp	Ile	Phe	Glu	Tyr	Asn	Ser	Asn	Gly
	530					535					540				
Leu	Leu	Gln	Lys	Ala	Tyr	Asn	Lys	Ala	Ser	Gly	Trp	Thr	Val	Gln	Tyr
545					550					555				560	
Tyr	Tyr	Asp	Gly	Leu	Gly	Arg	Arg	Val	Ala	Ser	Lys	Ser	Ser	Leu	Gly
				565				570						575	
Gln	His	Leu	Gln	Phe	Phe	Tyr	Ala	Asp	Leu	Thr	Asn	Pro	Ile	Arg	Val
			580					585					590		
Thr	His	Leu	Tyr	Asn	His	Thr	Ser	Ser	Glu	Ile	Thr	Ser	Leu	Tyr	Tyr
	595					600						605			
Asp	Leu	Gln	Gly	His	Leu	Ile	Ala	Met	Glu	Leu	Ser	Ser	Gly	Glu	Glu
	610					615					620				
Tyr	Tyr	Val	Ala	Cys	Asp	Asn	Thr	Gly	Thr	Pro	Leu	Ala	Val	Phe	Ser
625					630					635				640	
Ser	Arg	Gly	Gln	Val	Ile	Lys	Glu	Ile	Leu	Tyr	Thr	Pro	Tyr	Gly	Asp
				645					650					655	
Ile	Tyr	His	Asp	Thr	Tyr	Pro	Asp	Phe	Gln	Val	Ile	Ile	Gly	Phe	His
			660					665					670		
Gly	Gly	Leu	Tyr	Asp	Phe	Leu	Thr	Lys	Leu	Val	His	Leu	Gly	Gln	Arg
			675				680					685			
Asp	Tyr	Asp	Val	Val	Ala	Gly	Arg	Trp	Thr	Thr	Pro	Asn	His	His	Ile
	690					695					700				
Trp	Lys	Gln	Leu	Asn	Leu	Leu	Pro	Lys	Pro	Phe	Asn	Leu	Ser	Thr	Lys
705					710					715				720	
Leu	Ile	Lys	Tyr	Gly	Ile	Phe	His	Phe	Leu	Phe	Leu	Ile	Leu	Cys	Leu
				725					730					735	
Thr	Asp	Ile	Arg	Ser	Trp	Leu	Glu	Leu	Phe	Gly	Phe	Gln	Leu	His	Asn


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      740      745      750
Val Leu Pro Gly Phe Pro Lys Pro Glu Leu Glu Asn Ser Pro Ser Ile
      755      760      765
Xaa Gln Met Ser Asn Ser Met Leu His Leu Leu Cys Ala Ser Leu Ser
      770      775      780
Xaa Thr Ile Leu Gly Ile Gln Cys Glu Leu Gln Lys Gln Leu Arg Asn
      785      790      795      800
Phe Ile Ser Leu Asp Gln Leu Pro Met Thr Pro Arg Tyr Asn Asp Gly
      805      810      815
Arg Cys Leu Glu Gly Gly Lys Gln Pro Arg Phe Ala Ala Val Pro Ser
      820      825      830
Val Phe Gly Lys Gly Ile Lys Phe Ala Ile Lys Asp Gly Ile Val Thr
      835      840      845
Ala Asp Ile Ile Gly Val Ala Asn Glu Asp Ser Arg Arg Leu Ala Ala
      850      855      860
Ile Leu Asn Asn Ala His Tyr Leu Glu Asn Leu His Phe Thr Ile Glu
      865      870      875      880
Gly Arg Asp Thr His Tyr Phe Ile Lys Leu Gly Ser Leu Glu Glu Asp
      885      890      895
Leu Val Leu Ile Gly Asn Thr Gly Gly Arg Arg Ile Leu Glu Asn Gly
      900      905      910
Val Asn Val Thr Val Ser Gln Met Thr Ser Val Leu Asn Gly Arg Thr
      915      920      925
Arg Arg Phe Ala Asp Ile Gln Leu Gln His Gly Ala Leu Cys Phe Asn
      930      935      940
Ile Arg Tyr Gly Thr Thr Val Glu Glu Glu Lys Asn His Val Leu Glu
      945      950      955      960
Ile Ala Arg Gln Arg Ala Val Ala Gln Ala Trp Thr Lys Glu Gln Arg
      965      970      975
Arg Leu Gln Glu Gly Glu Glu Gly Ile Arg Ala Trp Thr Glu Gly Glu
      980      985      990
Lys Gln Gln Leu Leu Ser Thr Gly Arg Val Gln Gly Tyr Asp Gly Tyr
      995      1000      1005
Phe Val Leu Ser Val Glu Gln
      1010      1015

```

<210> 3326

<211> 250

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(250)

<223> Xaa = any amino acid or nothing

<400> 3326

```

Lys Ala Cys Leu His Leu Leu Ser Ser Phe Leu Thr Ser Asn Phe Leu
  1          5          10          15
Phe Asn Pro Leu Leu Pro Asp Ser Leu Tyr Ser Val Glu Ala Arg Ser
      20      25      30
Gln Arg Ala Asn Leu Gly Pro Cys Arg Arg Lys Arg Leu Gln Thr Leu
      35      40      45
Met Arg Leu Ala Ala Gly Phe Gln Tyr Ser Ser His Lys Asp Pro Ser
      50      55      60
Leu Ser Ala Lys Glu Lys His Thr Asp Tyr His Asn Glu Ala Arg Gly
      65      70      75      80
Pro Trp Pro Gly Trp Val Gly Xaa Arg Thr Ala Asp Gly Ser Cys Gly
      85      90      95
Arg Gly Pro Asp Gly Ala His His Pro Gly Pro Lys Ser Ser Ser Trp
      100      105      110
Arg Ala Ser Arg Leu Leu Pro Gly Leu Gly Gly Ser His His Leu Asp

```

115	120	125
Ala Tyr Val Gly Arg Asp Leu Glu Cys Gly Thr Pro Ala Pro Leu Gln		
130	135	140
Leu Glu Ile Pro Pro Gln Pro Arg Gly His Pro Ala Pro Ile Pro Thr		
145	150	155
Gly Gln Ala Gly Pro Arg Asp Ser Gly Pro Gly Ala Ser Pro Xaa Val		
165	170	175
Glu Thr Arg Pro Leu Thr Asp Gly Arg Arg Xaa Pro Gly Val Arg Pro		
180	185	190
Val Gly Trp Thr Pro Ala His Pro Ala Gly Thr Leu Arg Pro Arg Gly		
195	200	205
Ala Val Glu Pro Ser Val Ser Ala Cys Gly Lys Trp Ala Pro Ser Pro		
210	215	220
Thr Ser Gln Gly Cys Cys Glu Gly Arg Cys Asp Ala Val Pro Lys His		
225	230	235
Arg Ala Trp Arg Thr Pro Leu Cys Ser Gln		
245	250	

<210> 3327
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 3327

Cys Ser Glu Cys Gly Lys Ser Phe Cys Lys Lys Ser Lys Phe Ile Ile		
1	5	10
His Gln Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Gln Cys		
20	25	30
Gly Lys Ser Phe Cys Gln Lys Gly Thr Leu Thr Val His Gln Arg Thr		
35	40	45
His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Asn Phe		
50	55	60
Tyr Gln Lys Leu His Leu Ile Gln His Gln Arg Thr His Ser Gly Glu		
65	70	75
Lys Pro Tyr Glu Cys Ser Tyr Cys Gly Lys Ser Phe Cys Gln Lys Thr		
85	90	95
His Leu Thr Gln His Gln Arg Thr His Ser Gly Glu Arg Pro Tyr Val		
100	105	110
Cys His Asp Cys Gly Lys Thr Phe Ser Gln Lys Ser Ala Leu Asn Asp		
115	120	125
His Gln Lys Ile His Thr Gly Val Lys Leu Tyr		
130	135	139

<210> 3328
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 3328

Val Thr Arg Lys Leu Pro Ile Phe Ile Val Asp Ala Phe Thr Ala Arg		
1	5	10
Ala Phe Arg Gly Ser Pro Ala Ala Asp Cys Leu Leu Glu Asn Glu Leu		
20	25	30
Asp Glu Asp Met His Gln Lys Ile Ala Arg Glu Met Asn Leu Ser Glu		
35	40	45
Thr Ala Phe Ile Arg Lys Leu His Pro Thr Asp Asn Phe Ala Gln Arg		
50	55	60
Ser Cys Phe Gly Leu Ile Trp Phe Thr Pro Thr Thr Asp Leu Gln Ile		

```
<210> 3329
<211> 125
<212> PRT
<213> Homo sapiens
```

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<210> 3330
<211> 122
<212> PRT
<213> Homo sapiens
```

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<210> 3331
<211> 135
<212> PRT
<213> Homo sapiens
```

<400> 3331

```

Thr Phe Gly Cys Ser Cys Thr Asp Cys Phe Phe Gln Lys Cys Cys Pro
 1          5          10          15
Ala Glu Ala Gly Val Leu Leu Ala Tyr Asn Lys Asn Gln Gln Ile Lys
          20          25          30
Ile Pro Pro Gly Thr Pro Ile Tyr Glu Cys Asn Ser Arg Cys Gln Cys
          35          40          45
Gly Pro Asp Cys Pro Asn Arg Ile Val Gln Lys Gly Thr Gln Tyr Ser
          50          55          60
Leu Cys Ile Phe Arg Thr Ser Asn Gly Arg Gly Trp Gly Val Lys Thr
          65          70          75          80
Leu Val Lys Ile Lys Arg Met Ser Phe Val Met Glu Tyr Val Gly Glu
          85          90          95
Val Ile Thr Ser Glu Glu Ala Glu Arg Arg Gly Gln Phe Tyr Asp Asn
          100          105          110
Lys Gly Ile Thr Tyr Leu Phe Asp Leu Asp Tyr Glu Ser Asp Glu Phe
          115          120          125
Thr Val Asp Ala Ala Arg Tyr
          130          135

```

<210> 3332

<211> 145

<212> PRT

<213> Homo sapiens

<400> 3332

```

Pro Ala Ala Asp Phe Val Leu Gln Ala Arg Pro Thr Arg Ala Asp Ile
 1          5          10          15
Leu Gly Ile His Ser Lys Tyr Asp Glu Val Arg Lys Ala Gly Ala Cys
          20          25          30
Phe Tyr Lys Met Thr Gly Leu Gly Pro Gly Pro Gln Ala Leu Tyr Asn
          35          40          45
Gly Glu Pro Phe Lys His Glu Met Asn Ile Lys Glu Leu Lys Met
          50          55          60
Ala Val Leu Gln Arg Met Met Asp Ala Ser Val Tyr Leu Gln Arg Glu
          65          70          75          80
Val Phe Leu Gly Thr Leu Asn Asp Arg Thr Asn Ala Ile Asp Phe Leu
          85          90          95
Met Asp Arg Asn Asn Val Val Pro Arg Ile Asn Thr Leu Ile Leu Arg
          100          105          110
Thr Asn Gln Gln Tyr Leu Asn Leu Leu Ser Thr Ser Val Thr Ala Asp
          115          120          125
Ala Glu Asp Phe Ser Thr Phe Phe Phe Leu Asp Ser Gln Asp Lys Ser
          130          135          140
Ala
          145

```

<210> 3333

<211> 87

<212> PRT

<213> Homo sapiens

<400> 3333

```

Ala Trp Ile Ile Phe Leu Pro Pro Leu Thr Ser Cys Pro Leu Trp Ala
 1          5          10          15
Pro Gly Thr Lys His Lys Thr Ile Leu Glu Ala Arg Ser Gly Leu Gly
          20          25          30
Pro Ile Lys Ala Tyr Pro Arg Leu Gly Pro Pro Thr Pro Gly Glu Pro

```

```

      35      40      45
Glu Ala Pro Ala Gln Asp Arg Thr Phe His Cys Glu Ile Cys Asn Val
      50      55      60
Lys Val Asn Ser Lys Val Gln Leu Lys Gln His Ile Ser Ser Arg Arg
      65      70      75      80
His Glu Ile Val Asp Pro Val
      85      87

```

```

<210> 3334
<211> 35
<212> PRT
<213> Homo sapiens

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```

      <400> 3334
Ala Gly Pro Ser Leu Pro Ser Asn Leu Arg Gln Ile Phe Gln Ser Leu
      1      5      10      15
Pro Pro Phe Met Asp Ile Leu Leu Leu Leu Phe Phe Met Ile Ile
      20      25      30
Phe Ala Ile
      35

```

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<210> 3335
<211> 133
<212> PRT
<213> Homo sapiens

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```

      <400> 3335
Val Glu Ser Arg Asn Ser Arg Val Gln Pro Arg Val Arg Leu Asn Asp
      1      5      10      15
Arg Thr Asn Ala Ile Asp Phe Leu Met Asp Arg Asn Asn Val Val Pro
      20      25      30
Arg Ile Asn Thr Leu Ile Leu Arg Thr Asn Gln Gln Tyr Leu Asn Leu
      35      40      45
Ile Ser Thr Ser Val Thr Ala Asp Val Glu Asp Phe Ser Thr Phe Phe
      50      55      60
Phe Leu Asp Ser Gln Asp Lys Ser Ala Val Ile Ala Lys Asn Met Tyr
      65      70      75      80
Tyr Leu Thr Gln Asp Asp Glu Ser Ile Ile Ser Ala Ala Thr Leu Trp
      85      90      95
Ile Ile Ala Asp Phe Asp Lys Pro Ser Gly Arg Lys Leu Leu Phe Asn
      100      105      110
Ala Leu Lys His Met Ile Thr Ser Val His Ser Arg Val Gly Ile Ile
      115      120      125
Tyr Asn Pro Phe Phe
      130      133

```

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<210> 3336
<211> 334
<212> PRT
<213> Homo sapiens

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```

      <400> 3336
Pro Ser Ser Tyr Ser Ser Asp Glu Leu Ser Pro Gly Glu Pro Leu Thr
      1      5      10      15
Ser Pro Pro Trp Ala Pro Leu Gly Ala Pro Glu Arg Pro Glu His Leu

```

```

      20      25      30
Leu Asn Arg Val Leu Glu Arg Leu Ala Gly Gly Ala Thr Arg Asp Ser
      35      40      45
Ala Ala Ser Asp Ile Leu Leu Asp Asp Ile Val Leu Thr His Ser Leu
      50      55      60
Phe Leu Pro Thr Glu Lys Phe Leu Gln Glu Leu His Gln Tyr Phe Val
      65      70      75      80
Arg Ala Gly Gly Met Glu Gly Pro Glu Gly Leu Gly Arg Lys Gln Ala
      85      90      95
Cys Leu Ala Met Leu Leu His Phe Leu Asp Thr Tyr Gln Gly Leu Leu
      100      105      110
Gln Glu Glu Glu Gly Ala Gly His Ile Ile Lys Asp Leu Tyr Leu Leu
      115      120      125
Ile Met Lys Asp Glu Ser Leu Tyr Gln Gly Leu Arg Glu Asp Thr Leu
      130      135      140
Arg Leu His Gln Leu Val Glu Thr Val Glu Leu Lys Ile Pro Glu Glu
      145      150      155      160
Asn Gln Pro Pro Ser Lys Gln Val Lys Pro Leu Phe Arg His Phe Arg
      165      170      175
Arg Ile Asp Ser Cys Leu Gln Thr Arg Val Ala Phe Arg Gly Ser Asp
      180      185      190
Glu Ile Phe Cys Arg Val Tyr Met Pro Asp His Ser Tyr Val Thr Ile
      195      200      205
Arg Ser Arg Leu Ser Ala Ser Val Gln Asp Ile Leu Gly Ser Val Thr
      210      215      220
Glu Lys Leu Gln Tyr Ser Glu Glu Pro Ala Gly Arg Glu Asp Ser Leu
      225      230      235      240
Ile Leu Val Ala Val Ser Ser Ser Gly Glu Lys Val Leu Leu Gln Pro
      245      250      255
Thr Glu Asp Cys Val Phe Thr Ala Leu Gly Ile Asn Ser His Leu Phe
      260      265      270
Ala Cys Thr Arg Asp Ser Tyr Glu Ala Leu Val Pro Leu Pro Glu Glu
      275      280      285
Ile Gln Val Ser Pro Gly Asp Thr Glu Ile His Arg Val Glu Pro Glu
      290      295      300
Asp Val Ala Asn His Leu Thr Ala Phe His Trp Glu Leu Phe Arg Cys
      305      310      315      320
Val His Glu Leu Glu Phe Val Asp Tyr Val Phe His Gly Glu
      325      330      334

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<210> 3337

<211> 134

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(134)

<223> Xaa = any amino acid or nothing

<400> 3337

```

Lys Ile Leu Leu Cys Leu Ala Asn Gln Phe Pro Asp Ile Ser Phe Cys
  1      5      10      15
Pro Ala Leu Pro Ala Val Val Ala Leu Leu His Tyr Ser Ile Asp
      20      25      30
Glu Ala Glu Cys Phe Glu Lys Ala Cys Arg Ile Leu Ala Cys Asn Asp
      35      40      45
Pro Gly Arg Arg Leu Ile Asp Gln Ser Phe Leu Ala Phe Glu Ser Ser
      50      55      60
Cys Met Thr Phe Gly Asp Leu Val Asn Lys Tyr Cys Gln Ala Ala His
      65      70      75      80
Lys Leu Met Val Ala Val Ser Glu Asp Val Leu Gln Val Tyr Ala Asp

```

				85					90					95			
Trp	Gln	Arg	Trp	Leu	Phe	Gly	Glu	Leu	Pro	Leu	Cys	Tyr	Phe	Ala	Arg		
			100					105					110				
Val	Phe	Asp	Val	Phe	Leu	Val	Glu	Gly	Tyr	Lys	Val	Leu	Tyr	Arg	Val		
		115					120					125					
Ala	Leu	Ala	Xaa	Xaa	Phe												
	130				134												

<210> 3338
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 3338

Phe	Arg	Gly	Lys	Val	Arg	Gly	Arg	Ser	Ala	Glu	Met	Pro	Gly	Ser	Asp		
1				5					10					15			
Thr	Ala	Leu	Thr	Val	Asp	Arg	Thr	Tyr	Ser	Asp	Pro	Gly	Arg	His	His		
			20					25					30				
Arg	Cys	Lys	Ser	Arg	Val	Glu	Arg	His	Asp	Met	Asn	Thr	Leu	Ser	Leu		
		35					40					45					
Pro	Leu	Asn	Ile	Arg	Arg	Gly	Gly	Ser	Asp	Thr	Asn	Leu	Asn	Phe	Asp		
		50				55					60						
Val	Pro	Asp	Gly	Ile	Leu	Asp	Phe	His	Lys	Val	Lys	Leu	Thr	Ala	Asp		
	65				70					75					80		
Ser	Leu	Lys	Gln	Lys	Ile	Leu	Lys	Val	Thr	Glu	Gln	Ile	Lys	Ile	Glu		
				85				90						95			
Gln	Thr	Ser	Arg	Asp	Gly	Asn	Val	Ala	Glu	Tyr	Leu	Lys	Leu	Val	Asn		
			100					105					110				
Asn	Ala	Asp	Lys	Gln	Gln	Ala	Gly	Arg	Ile	Lys	Gln	Val	Phe	Glu	Lys		
		115					120					125					
Lys	Asn	Gln	Lys														
	130		132														

<210> 3339
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 3339

Ala	Ala	Ala	Ala	Ser	Asn	Trp	Gly	Leu	Ile	Thr	Asn	Ile	Val	Asn	Ser		
1				5					10					15			
Ile	Val	Gly	Val	Ser	Val	Leu	Thr	Met	Pro	Phe	Cys	Phe	Lys	Gln	Cys		
			20					25					30				
Gly	Ile	Val	Leu	Gly	Ala	Leu	Leu	Val	Phe	Cys	Ser	Trp	Met	Thr			
		35					40					45					
His	Gln	Ser	Cys	Met	Phe	Leu	Val	Lys	Ser	Ala	Ser	Leu	Ser	Lys	Arg		
		50				55					60						
Arg	Thr	Tyr	Ala	Gly	Leu	Ala	Phe	His	Ala	Tyr	Gly	Lys	Ala	Gly	Lys		
	65				70					75					80		
Met	Leu	Val	Glu	Thr	Ser	Met	Ile	Gly	Leu	Met	Leu	Gly	Thr	Cys	Ile		
				85				90						95			
Ala	Phe	Tyr	Val	Val	Ile	Gly	Asp	Leu	Gly	Ser	Asn	Phe	Phe	Ala	Arg		
			100					105					110				
Leu	Phe	Gly	Phe	Gln	Val	Gly	Gly	Thr	Phe	Arg	Met	Phe	Leu	Leu	Phe		
		115					120					125					
Ala	Val	Ser	Leu	Cys	Ile	Val	Leu	Pro	Leu	Ser	Leu	Gln	Arg	Asn	Met		
	130						135				140						
Met	Ala	Ser	Ile	Gln	Ser	Phe	Ser	Ala	Met	Ala	Leu	Leu	Phe	Tyr	Thr		

145		150		155		160
Val Phe Met Phe	Val Ile Val Leu Ser	Ser Leu Lys His Gly	Leu Phe			
	165	170	175			
Ser Gly Gln Trp	Leu Arg Arg Val Ser Tyr	Val Arg Trp Glu Gly	Val			
	180	185	190			
Phe Arg Cys Ile	Pro Ile Phe Gly Met	Ser Phe Ala Cys Gln	Ser Gln			
	195	200	205			
Val Leu Pro Thr	Tyr Asp Ser Leu Asp	Glu Pro Ser Val				
210	215	220 221				

<210> 3340
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 3340													
Leu Leu Pro Leu	Gln Val Leu Gln Glu	Ala Phe Ser Arg	Cys Val Ala										
1	5	10	15										
Val Leu Thr Arg	Ser Ser Lys Pro Ser	Asp Met Ser Val	Gln Val Cys										
	20	25	30										
Gly Tyr Ile Ser	Lys Cys Tyr Ser	Val Ala Ala Gln	Phe Glu Glu Cys										
	35	40	45										
Arg Glu Lys Ile	Thr Glu Met Pro												
50	55 56												

<210> 3341
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 3341													
His Ser Val Ile	Lys Arg Thr Pro Arg	Lys Tyr Leu Ala	Glu Ile Val										
1	5	10	15										
Leu Ile Asp Asp	Phe Ser Asn Lys Glu	His Leu Lys Glu	Lys Leu Asp										
	20	25	30										
Glu Tyr Ile Lys	Leu Trp Asn Gly	Leu Val Lys Val	Phe Arg Asn Glu										
	35	40	45										
Arg Arg Glu Gly	Leu Ile Gln Ala	Arg Ser Ile Gly	Ala Gln Lys Ala										
	50	55	60										
Lys Leu Gly Gln	Val Leu Ile Tyr	Leu Asp Ala His	Cys Glu Val Ala										
65	70	75	80										
Val Asn Trp Tyr	Ala Pro Leu Val	Ala Pro Ile	Ser Lys Asp Arg										
	85	90	95										

<210> 3342
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400> 3342													
Asn Leu Thr Trp	Trp Pro Leu Phe	Arg Asp Val Ser	Phe Tyr Ile Val										
1	5	10	15										
Asp Leu Ile Met	Leu Ile Ile Phe	Phe Leu Asp Asn	Val Ile Met Trp										
	20	25	30										
Trp Glu Ser Leu	Leu Leu Leu Thr	Ala Tyr Phe	Cys Tyr Val Val Phe										


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<210> 3343
<211> 128
<212> PRT
<213> Homo sapiens
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```
<210> 3344
<211> 67
<212> PRT
<213> Homo sapiens
```

<210> 3345
<211> 67

<212> PRT

<213> Homo sapiens

<400> 3345

```

Ser Pro Ala Cys Ile Thr Ser Ser Leu Ser Gln His Ile Ala Asp Pro
 1                    5                    10                    15
Arg Ala Ala Pro Thr Glu Val Lys Val Arg Val Met Asn Ser Thr Ala
                20                25                30
Ile Ser Leu Gln Trp Asn Arg Val Tyr Ser Asp Thr Val Gln Gly Gln
        35                40                45
Leu Arg Glu Tyr Arg Val Arg Lys Pro Ala Pro Asp Ser Pro Asn Tyr
 50                55                60
Pro Ala His
65                67

```

<210> 3346

<211> 501

<212> PRT

<213> Homo sapiens

<400> 3346

```

Ala Gly Ile Arg His Glu Ala Pro Pro Thr Thr Ser Asn Arg His Arg
 1                    5                    10                    15
Arg Gln Ile Asp Arg Gly Val Thr His Leu Asn Ile Ser Gly Leu Lys
        20                25                30
Met Pro Arg Gly Ile Ala Ile Asp Trp Val Ala Gly Asn Val Tyr Trp
        35                40                45
Thr Asp Ser Gly Arg Asp Val Ile Glu Val Ala Gln Met Lys Gly Glu
 50                55                60
Asn Arg Lys Thr Leu Ile Ser Gly Met Ile Asp Glu Pro His Ala Ile
65                70                75                80
Val Val Asp Pro Leu Arg Gly Thr Met Tyr Trp Ser Asp Trp Gly Asn
        85                90                95
His Pro Lys Ile Glu Thr Ala Ala Met Asp Gly Thr Leu Arg Glu Thr
        100                105                110
Leu Val Gln Asp Asn Ile Gln Trp Pro Thr Gly Leu Ala Val Asp Tyr
        115                120                125
His Asn Glu Arg Leu Tyr Trp Ala Asp Ala Lys Leu Ser Val Ile Gly
130                135                140
Ser Ile Arg Leu Asn Gly Thr Asp Pro Ile Val Ala Ala Asp Ser Lys
145                150                155                160
Arg Gly Leu Ser His Pro Phe Ser Ile Asp Val Phe Glu Asp Tyr Ile
        165                170                175
Tyr Gly Val Thr Tyr Ile Asn Asn Arg Val Phe Lys Ile His Lys Phe
        180                185                190
Gly His Ser Pro Leu Val Asn Leu Thr Gly Gly Leu Ser His Ala Ser
        195                200                205
Asp Val Val Leu Tyr His Gln His Lys Gln Pro Glu Val Thr Asn Pro
210                215                220
Cys Asp Arg Lys Lys Cys Glu Trp Leu Cys Leu Leu Ser Pro Ser Gly
225                230                235                240
Pro Val Cys Thr Cys Pro Asn Gly Lys Arg Leu Asp Asn Gly Thr Cys
        245                250                255
Val Pro Val Pro Ser Pro Thr Pro Pro Pro Asp Ala Pro Arg Pro Gly
        260                265                270
Thr Cys Asn Leu Gln Cys Phe Asn Gly Gly Ser Cys Phe Leu Asn Ala
275                280                285
Arg Arg Gln Pro Lys Cys Arg Cys Gln Pro Arg Tyr Thr Gly Asp Lys
290                295                300
Cys Glu Leu Asp Gln Cys Trp Glu His Cys Arg Asn Gly Gly Thr Cys

```

```

305          310          315          320
Ala Ala Ser Pro Ser Gly Met Pro Thr Cys Arg Cys Pro Thr Gly Phe
          325          330          335
Thr Gly Pro Lys Cys Thr Gln Gln Val Cys Ala Gly Tyr Cys Ala Asn
          340          345          350
Asn Ser Thr Cys Thr Val Asn Gln Gly Asn Gln Pro Gln Cys Arg Cys
          355          360          365
Leu Pro Gly Phe Leu Gly Asp Arg Cys Gln Tyr Arg Gln Cys Ser Gly
          370          375          380
Tyr Cys Glu Asn Phe Gly Thr Cys Gln Met Ala Ala Asp Gly Ser Arg
385          390          395          400
Gln Cys Arg Cys Thr Ala Tyr Phe Glu Gly Ser Arg Cys Glu Val Asn
          405          410          415
Lys Cys Ser Arg Cys Leu Glu Gly Ala Cys Val Val Asn Lys Gln Ser
          420          425          430
Gly Asp Val Thr Cys Asn Cys Thr Asp Gly Arg Val Ala Pro Ser Cys
          435          440          445
Leu Thr Cys Val Gly His Cys Ser Asn Gly Gly Ser Cys Thr Met Asn
          450          455          460
Ser Lys Met Met Pro Glu Cys Gln Cys Pro Pro His Met Thr Gly Pro
465          470          475          480
Arg Cys Glu Glu His Val Phe Ser Gln Gln Gln Pro Gly His Ile Ala
          485          490          495
Ser Ile Leu Ile Pro
          500 501

```

<210> 3347

<211> 105

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(103)

<223> Xaa = any amino acid or nothing

<400> 3347

```

Ser Pro Glu Met Glu Ser His Pro Ile Thr Gln Ala Gly Val Gln Trp
1          5          10          15
His His Leu Ser Ser Leu Gln Pro Leu Pro Pro Gly Phe Lys Xaa Phe
          20          25          30
Ser Cys Phe Ser Leu Pro Glu Xaa Leu Gly Tyr Arg His Val Pro Pro
          35          40          45
Cys Leu Ala Asn Ser Val Phe Ser Val Glu Met Gly Phe Leu His Val
          50          55          60
Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly Asp Leu Pro Ala Leu
65          70          75          80
Ala Ser Gln Ser Ala Gly Ile Thr Gly Ser His Arg Ala Arg Pro Glu
          85          90          95
Asn Gly Phe Glu Asn Ile Phe
          100          103

```

<210> 3348

<211> 390

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(390)

<223> Xaa = any amino acid or nothing

<400> 3348

Leu	Ser	Lys	Ile	Thr	Met	Pro	Val	Ile	Cys	Asn	Glu	Pro	Leu	Ser	Phe
1				5					10					15	
Ile	Gln	Arg	Leu	Thr	Glu	Tyr	Met	Xaa	His	Thr	Tyr	Phe	Ile	His	Arg
			20					25					30		
Pro	Ser	Ser	Leu	Ser	Asp	Pro	Val	Asp	Arg	Met	Gln	Cys	Val	Ala	Ala
			35				40					45			
Phe	Ala	Val	Ser	Ala	Val	Ala	Ser	Gln	Trp	Glu	Arg	Thr	Gly	Lys	Pro
	50					55				60					
Phe	Asn	Pro	Leu	Leu	Gly	Glu	Thr	Tyr	Glu	Leu	Val	Arg	Asp	Asp	Leu
65					70					75					80
Gly	Phe	Arg	Leu	Ile	Ser	Glu	Gln	Val	Ser	His	His	Pro	Pro	Ile	Ser
				85					90					95	
Ala	Phe	His	Ala	Glu	Gly	Leu	Asn	Asn	Asp	Phe	Ile	Phe	His	Gly	Ser
			100				105						110		
Ile	Tyr	Pro	Lys	Leu	Lys	Phe	Trp	Gly	Lys	Ser	Val	Glu	Ala	Glu	Pro
	115					120						125			
Lys	Gly	Thr	Ile	Thr	Leu	Glu	Leu	Leu	Glu	His	Asn	Glu	Ala	Tyr	Thr
	130					135					140				
Trp	Thr	Asn	Pro	Thr	Cys	Cys	Val	His	Asn	Ile	Ile	Val	Gly	Lys	Leu
145					150				155						160
Trp	Ile	Glu	Gln	Tyr	Gly	Asn	Val	Glu	Ile	Ile	Asn	His	Lys	Thr	Gly
				165				170					175		
Asp	Lys	Cys	Val	Leu	Asn	Phe	Lys	Pro	Cys	Gly	Leu	Phe	Gly	Lys	Glu
			180					185					190		
Leu	His	Lys	Val	Glu	Gly	Tyr	Ile	Gln	Asp	Lys	Ser	Lys	Lys	Lys	Leu
	195						200					205			
Cys	Ala	Leu	Tyr	Gly	Lys	Trp	Thr	Glu	Cys	Leu	Tyr	Ser	Val	Asp	Pro
	210					215					220				
Ala	Thr	Phe	Asp	Ala	Tyr	Lys	Lys	Asn	Asp	Lys	Lys	Asn	Thr	Glu	Glu
225					230				235					240	
Lys	Lys	Asn	Ser	Lys	Gln	Met	Ser	Thr	Ser	Glu	Glu	Leu	Asp	Glu	Met
				245				250						255	
Pro	Val	Pro	Asp	Ser	Glu	Ser	Val	Phe	Ile	Ile	Pro	Gly	Ser	Val	Leu
			260					265					270		
Leu	Trp	Arg	Ile	Ala	Pro	Arg	Pro	Pro	Asn	Ser	Ala	Gln	Met	Tyr	Asn
	275						280					285			
Phe	Thr	Ser	Phe	Ala	Met	Val	Leu	Asn	Glu	Val	Asp	Lys	Asp	Met	Glu
290						295					300				
Ser	Val	Ile	Pro	Lys	Thr	Asp	Cys	Arg	Leu	Arg	Pro	Asp	Ile	Arg	Ala
305					310					315				320	
Met	Glu	Asn	Gly	Glu	Ile	Asp	Gln	Ala	Ser	Glu	Glu	Lys	Lys	Arg	Leu
				325				330						335	
Glu	Glu	Lys	Gln	Arg	Ala	Ala	Arg	Lys	Asn	Arg	Ser	Lys	Ser	Glu	Glu
			340					345					350		
Asp	Trp	Lys	Thr	Arg	Trp	Phe	His	Gln	Gly	Pro	Asn	Pro	Tyr	Asn	Gly
	355						360					365			
Ala	Gln	Asp	Trp	Ile	Tyr	Ser	Gly	Ser	Tyr	Trp	Asp	Arg	Asn	Tyr	Phe
370						375					380				
Asn	Leu	Pro	Asp	Ile	Tyr										
385					390										

<210> 3349

<211> 92

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(92)

<223> Xaa = any amino acid or nothing

<400> 3349

```

Asn Phe Ala Ser Ser Ser Gly Lys Tyr Leu Arg Thr Gln Lys Ile Lys
 1           5           10           15
Cys Leu Asn Asn Lys Phe Thr Pro Phe Pro Thr Thr Glu Lys Lys Xaa
           20           25           30
Ser Gln Ser Val Arg Pro Pro Xaa Ser Asn Arg Ile Tyr Xaa Ile Leu
           35           40           45
Gln Ser Xaa Asn Ile Ser Phe Ser Xaa Leu Pro Asn Xaa Asn Phe Ala
           50           55           60
Ser Ser Ser Gly Lys Tyr Leu Arg Thr Gln Lys Ile Lys Cys Leu Asn
 65           70           75           80
Asn Lys Phe Thr Pro Phe Pro Thr Thr Glu Lys Lys
           85           90           92

```

<210> 3350

<211> 237

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(237)

<223> Xaa = any amino acid or nothing

<400> 3350

```

Gly Ala Pro Ala Gln Asp Cys Ile Cys Leu Pro Phe Pro Phe His Ser
 1           5           10           15
Ser Phe Leu Glu Ser Asp Ile Arg Lys Pro Ala Arg Arg Lys Ile Gln
           20           25           30
Thr Thr Asn Pro Asp Phe Leu Leu Leu Phe Met Ser Val Pro Val
           35           40           45
Val Ser Ala Pro Pro Phe Cys Pro Pro Ala Glu Gly Ser Arg Asp Gly
           50           55           60
Arg Pro Lys Ala Ser Val Ala Arg Pro Ala Ala Val His Glu His His
 65           70           75           80
Ser Pro Arg Asp Cys Gly His Leu Pro Asp Val Ile Arg Ser Ser Leu
           85           90           95
Gly Gly Trp Gln Pro His Xaa Pro Ala Gln Pro Glu Asn Arg Leu Leu
           100           105           110
Xaa Leu Leu Pro Val Glu Xaa Gly His Gln His Pro Thr Val Ser Pro
           115           120           125
Val Pro Xaa Ala Gly Ser Pro Gly Gly Ala Ser Gly Trp Pro Gly Pro
           130           135           140
Gly Gln Ala Trp Arg Val Arg Val Pro Gly Pro His Pro Leu Cys Pro
 145           150           155           160
Pro Ala Ser Pro Pro Ser Pro Val Gln Gln Xaa Xaa Glu Ser Val Ala
           165           170           175
Ala Gly Ser Gly Leu Pro Gly Cys Val Leu Cys Ala Ala Gly Arg Arg
           180           185           190
Pro Gly Pro Leu Pro Leu Leu Cys Val Glu Val Gly Gln Ala Leu Pro
           195           200           205
Pro Gly Ala Trp Val Ser Ser Ser Gly Gln Arg Pro Gly Leu Thr His
 210           215           220
Pro Leu Ala Tyr Ser His Gly Cys Val Pro Ser Glu Gly
 225           230           235           237

```

<210> 3351

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3351

```

Met Ala Ala Val Val Ala Ala Thr Ala Leu Lys Gly Arg Gly Ala Arg
 1           5           10           15
Asn Ala Arg Val Leu Arg Gly Ile Leu Ala Gly Ala Thr Ala Asn Lys
          20           25           30
Ala Ser His Asn Arg Thr Arg Ala Leu Gln Ser His Ser Ser Pro Glu
          35           40           45
Gly Lys Glu Glu Pro Glu Pro Leu Ser Pro Glu Leu Glu Tyr Ile Pro
          50           55           60
Arg Lys Arg Gly Lys Asn Pro Met Lys Ala Val Gly Leu Ala Trp Ala
          65           70           75           80
Ile Gly Phe Pro Cys Gly Ile Leu Leu Phe Ile Leu Thr Lys Arg Glu
          85           90           95
Val Asp Lys Asp Arg Val Lys Gln Met Lys Ala Arg Gln Asn Met Arg
          100          105          110
Leu Ser Asn Thr Gly Glu Tyr Glu Ser Gln Arg Phe Arg Ala Ser Ser
          115          120          125
Gln Ser Ala Pro Ser Pro Asp Val Gly Ser Gly Val Gln Thr
          130          135          140          142

```

<210> 3352

<211> 279

<212> PRT

<213> Homo sapiens

<400> 3352

```

Arg Thr Leu Phe Arg Gly Arg Arg Arg Arg Glu Asp Asp Arg Ile Ser
 1           5           10           15
Arg Pro His Pro Ser Thr Ala Glu Ser Lys Ala Pro Thr Pro Lys Phe
          20           25           30
Asp Leu Leu Ala Ser Asn Phe Pro Pro Leu Pro Gly Ser Ser Ser Arg
          35           40           45
Met Pro Gly Glu Leu Val Leu Glu Asn Arg Met Ser Asp Val Val Lys
          50           55           60
Gly Val Tyr Lys Glu Lys Asp Asn Glu Glu Leu Thr Ile Ser Cys Pro
          65           70           75           80
Val Pro Ala Asp Glu Gln Thr Glu Cys Thr Ser Ala Gln Gln Leu Asn
          85           90           95
Met Ser Thr Ser Ser Pro Cys Ala Ala Glu Leu Thr Ala Leu Ser Thr
          100          105          110
Thr Gln Gln Glu Lys Asp Leu Ile Glu Asp Ser Ser Val Gln Lys Asp
          115          120          125
Gly Leu Asn Gln Thr Thr Ile Pro Val Ser Pro Pro Ser Thr Thr Lys
          130          135          140
Pro Ser Arg Ala Ser Thr Ala Ser Pro Cys Asn Asn Asn Ile Asn Ala
          145          150          155          160
Ala Thr Ala Val Ala Leu Gln Glu Pro Arg Lys Leu Ser Tyr Ala Glu
          165          170          175
Val Cys Gln Lys Pro Pro Lys Glu Pro Ser Ser Val Leu Val Gln Pro
          180          185          190
Leu Arg Glu Leu Arg Ser Asn Val Val Ser Pro Thr Lys Asn Glu Asp
          195          200          205
Asn Gly Ala Pro Glu Asn Ser Val Glu Lys Pro His Glu Lys Pro Glu
          210          215          220
Ala Arg Ala Ser Lys Asp Tyr Ser Gly Phe Arg Gly Asn Ile Ile Pro
          225          230          235          240
Arg Gly Ala Ala Gly Lys Ile Arg Glu Gln Arg Arg Gln Phe Ser His

```

				245					250					255	
Arg	Ala	Ile	Pro	Gln	Gly	Val	Thr	Arg	Arg	Asn	Gly	Lys	Glu	Gln	Tyr
			260					265					270		
Val	Pro	Pro	Arg	Ser	Pro	Lys									
		275				279									

<210> 3353
 <211> 155
 <212> PRT
 <213> Homo sapiens

<400> 3353

Ile	Ala	Thr	Pro	Thr	Trp	Thr	Ala	Pro	Leu	Thr	Ala	Thr	Pro	Thr	Pro
1				5					10					15	
Ala	His	Gln	Tyr	Gly	Pro	Ala	Arg	Val	Pro	Asn	Gly	Ala	Pro	Arg	Leu
		20					25					30			
Glu	Pro	Pro	Pro	Gly	Lys	Arg	Glu	Cys	Arg	Val	Gly	Gln	Tyr	Val	Val
	35					40					45				
Asp	Leu	Thr	Ser	Phe	Glu	Gln	Leu	Ala	Leu	Pro	Val	Leu	Arg	Asn	Ala
50					55					60					
Asp	Cys	Ser	Ser	Gly	Pro	Gly	Gln	Arg	Val	Cys	Val	Ile	Asp	Glu	Ile
65				70					75					80	
Gly	Lys	Met	Glu	Leu	Phe	Ser	Gln	Leu	Phe	Ile	Gln	Ala	Val	Arg	Gln
			85				90						95		
Thr	Leu	Ser	Thr	Pro	Gly	Thr	Ile	Ile	Leu	Gly	Thr	Ile	Pro	Val	Pro
		100					105					110			
Lys	Gly	Lys	Pro	Leu	Ala	Leu	Val	Glu	Glu	Ile	Arg	Asn	Arg	Lys	Asp
	115					120					125				
Val	Lys	Val	Phe	Asn	Val	Thr	Lys	Glu	Asn	Arg	Asn	His	Leu	Leu	Pro
130					135						140				
Asp	Ile	Val	Thr	Cys	Val	Gln	Ser	Ser	Arg	Lys					
145					150					155					

<210> 3354
 <211> 404
 <212> PRT
 <213> Homo sapiens

<400> 3354

Gly	Met	Glu	Pro	Val	Gly	Cys	Cys	Gly	Glu	Cys	Arg	Gly	Ser	Ser	Val
1				5					10					15	
Asp	Pro	Arg	Ser	Thr	Phe	Val	Leu	Ser	Asn	Leu	Ala	Glu	Val	Val	Glu
		20					25					30			
Arg	Val	Leu	Thr	Phe	Leu	Pro	Ala	Lys	Ala	Leu	Leu	Arg	Val	Ala	Cys
	35					40					45				
Val	Cys	Arg	Leu	Trp	Arg	Glu	Cys	Val	Arg	Arg	Val	Leu	Arg	Thr	His
50				55					60						
Arg	Ser	Val	Thr	Trp	Ile	Ser	Ala	Gly	Leu	Ala	Glu	Ala	Gly	His	Leu
65				70					75					80	
Glu	Gly	His	Cys	Leu	Val	Arg	Val	Val	Ala	Glu	Glu	Leu	Glu	Asn	Val
			85				90						95		
Arg	Ile	Leu	Pro	His	Thr	Val	Leu	Tyr	Met	Ala	Asp	Ser	Glu	Thr	Phe
		100					105					110			
Ile	Ser	Leu	Glu	Glu	Cys	Arg	Gly	His	Lys	Arg	Ala	Arg	Lys	Arg	Thr
	115					120					125				
Ser	Met	Glu	Thr	Ala	Leu	Ala	Leu	Glu	Lys	Leu	Phe	Pro	Lys	Gln	Cys
130					135						140				
Gln	Val	Leu	Gly	Ile	Val	Thr	Pro	Gly	Ile	Val	Val	Thr	Pro	Met	Gly

```

145          150          155          160
Ser Gly Ser Asn Arg Pro Gln Glu Ile Glu Ile Gly Glu Ser Gly Phe
          165          170          175
Ala Leu Leu Phe Pro Gln Ile Glu Gly Ile Lys Ile Gln Pro Phe His
          180          185          190
Phe Ile Lys Asp Pro Lys Asn Leu Thr Leu Glu Arg His Gln Leu Thr
          195          200          205
Glu Val Gly Leu Leu Asp Asn Pro Glu Leu Arg Val Val Leu Val Phe
          210          215          220
Gly Tyr Asn Cys Cys Lys Val Gly Ala Ser Asn Tyr Leu Gln Gln Val
          225          230          235
Val Ser Thr Phe Ser Asp Met Asn Ile Ile Leu Ala Gly Gly Gln Val
          245          250          255
Asp Asn Leu Ser Ser Leu Thr Ser Glu Lys Asn Pro Leu Asp Ile Asp
          260          265          270
Ala Ser Gly Val Val Gly Leu Ser Phe Ser Gly His Arg Ile Gln Ser
          275          280          285
Ala Thr Val Leu Leu Asn Glu Asp Val Ser Asp Glu Lys Thr Ala Glu
          290          295          300
Ala Ala Met Gln Arg Leu Lys Ala Ala Asn Ile Pro Glu His Asn Thr
          305          310          315
Ile Gly Phe Met Phe Ala Cys Val Gly Arg Gly Phe Gln Tyr Tyr Arg
          325          330          335
Ala Lys Gly Asn Val Glu Ala Asp Ala Phe Arg Lys Phe Phe Pro Ser
          340          345          350
Val Pro Leu Phe Gly Phe Phe Gly Asn Gly Glu Ile Gly Cys Asp Arg
          355          360          365
Ile Val Thr Gly Asn Phe Ile Leu Arg Lys Cys Asn Glu Val Lys Asp
          370          375          380
Asp Asp Leu Phe His Ser Tyr Thr Thr Ile Met Ala Leu Ile His Leu
          385          390          395          400
Gly Ser Ser Lys
          404

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```

<210> 3355
<211> 235
<212> PRT
<213> Homo sapiens

```

```

          <400> 3355
Gly Thr Ser Ser Gly Leu Gly Gly Asp Arg Leu Ala Ala Pro Gly Pro
  1          5          10          15
Ser Pro Pro Ser Phe Tyr Pro Gln Gly Arg Gly Glu Arg Ala Tyr Asp
          20          25          30
Ile Tyr Ser Arg Leu Leu Arg Glu Arg Ile Val Cys Val Met Gly Pro
          35          40          45
Ile Asp Asp Ser Val Ala Ser Leu Val Ile Ala Gln Leu Leu Phe Leu
          50          55          60
Gln Ser Glu Ser Asn Lys Lys Pro Ile His Met Tyr Ile Asn Ser Pro
          65          70          75          80
Gly Gly Val Val Thr Ala Gly Leu Ala Ile Tyr Asp Thr Met Gln Tyr
          85          90          95
Ile Leu Asn Pro Ile Cys Thr Trp Cys Val Gly Gln Ala Ala Ser Met
          100          105          110
Gly Ser Leu Leu Leu Ala Ala Gly Thr Pro Gly Met Arg His Ser Leu
          115          120          125
Pro Asn Ser Arg Ile Met Ile His Gln Pro Ser Gly Gly Ala Arg Gly
          130          135          140
Gln Ala Thr Asp Ile Ala Ile Gln Ala Glu Glu Ile Met Lys Leu Lys
          145          150          155          160
Lys Gln Leu Tyr Asn Ile Tyr Ala Lys His Thr Lys Gln Ser Leu Gln

```



```

      165      170      175
Val Ile Glu Ser Ala Met Glu Arg Asp Arg Tyr Met Ser Pro Met Glu
      180      185      190
Ala Gln Glu Phe Gly Ile Leu Asp Lys Val Leu Val His Pro Pro Gln
      195      200      205
Asp Gly Glu Asp Glu Pro Thr Leu Val Gln Lys Glu Pro Val Glu Ala
      210      215      220
Ala Pro Ala Ala Glu Pro Val Pro Ala Ser Thr
      225      230      235

```

```

<210> 3356
<211> 84
<212> PRT
<213> Homo sapiens

```

```

<221> misc_feature
<222> (1)...(83)
<223> Xaa = any amino acid or nothing

```

```

      <400> 3356
Phe Asn Tyr Asn Phe Cys Arg Asn Leu His Met Pro Ser Phe Leu Val
  1          5          10          15
Xaa Pro Gly Met Cys Gly Leu Leu Ala Lys His Leu Ser Phe His Ile
      20      25      30
Val Gly Ala Phe Leu Ile Thr Leu Gly Val Ala Ala Leu Cys Lys Phe
      35      40      45
Ala Val Ala Xaa Pro Arg Lys Lys Ala Tyr Ala Asp Phe Tyr Arg Asn
      50      55      60
Tyr Asn Xaa Ile Lys Glu Phe Glu Val Arg Lys Ala Asn Ile Ser Gln
      65      70      75      80
Ser Thr Lys
      83

```

```

<210> 3357
<211> 134
<212> PRT
<213> Homo sapiens

```

```

<221> misc_feature
<222> (1)...(133)
<223> Xaa = any amino acid or nothing

```

```

      <400> 3357
Ala Leu Gly Ser Cys Gly Gly Leu Leu Gly Thr Gly Leu Leu Lys Gly
  1          5          10          15
Thr Met Ser Gly Thr Leu Trp Ser Lys Gly Ile Phe Ala Gly Tyr Lys
      20      25      30
Arg Arg Ile Arg Ile Gln Arg Glu His Thr Ala Val Leu Lys Ile Glu
      35      40      45
Gly Val Tyr Ala Arg Asp Glu Thr Glu Phe Tyr Leu Arg Met Ile Cys
      50      55      60
Ala Asn Val Tyr Lys Ala Asn Asn Asn Thr Val Thr Pro Val Leu Thr
      65      70      75      80
Pro Asp Lys Thr Arg Val Met Trp Arg Lys Val Thr Gln Ala His Gly
      85      90      95
Ile Ser Ile Met Val Arg Ala Gln Phe Arg Thr Asn Leu Pro Ala Asp
      100      105      110
Ala Ile Gly His Arg Ile Arg Met Met Leu Xaa Pro Ser Arg Met Tyr

```

115
Thr Thr Glu Pro Ser
130 133

120

125

<210> 3358

<211> 946

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(939)

<223> Xaa = any amino acid or nothing

<400> 3358

Phe Cys Ser Lys Asp Lys Cys Cys Leu Tyr Leu Pro Asp Ser Ile Asn
1 5 10 15
Arg Ser Lys Ser Cys Thr Ala Lys Pro Gly Ala His Ser Gln Asp Arg
20 25 30
His Ala Val Met Asp Ser Glu Arg Gln Val Lys Asp Thr Asp Asp Ile
35 40 45
Glu Ser Pro Lys Arg Ser Ile Arg Asp Ser Gly Tyr Ile Asp Cys Trp
50 55 60
Asp Ser Glu Arg Ser Asp Ser Leu Ser Pro Pro Arg His Gly Arg Asp
65 70 75 80
Asp Ser Phe Asp Ser Leu Asp Ser Phe Gly Ser Arg Ser Arg Gln Thr
85 90 95
Pro Ser Pro Asp Val Val Leu Arg Gly Ser Ser Asp Gly Arg Gly Ser
100 105 110
Asp Ser Glu Ser Asp Leu Pro His Arg Lys Leu Pro Asp Val Lys Lys
115 120 125
Asp Asp Met Ser Ala Arg Arg Thr Ser His Gly Glu Pro Lys Ser Ala
130 135 140
Val Pro Phe Asn Gln Tyr Leu Pro Asn Lys Ser Asn Gln Thr Ala Tyr
145 150 155 160
Val Pro Ala Pro Leu Arg Lys Lys Lys Ala Glu Arg Glu Glu Tyr Arg
165 170 175
Lys Ser Trp Ser Thr Ala Thr Ser Pro Ala Gly Leu Gly Lys Lys Ala
180 185 190
Leu Gln Asp Tyr Gly Pro Arg Thr Pro Val Ser Asp Asp Ala Glu Ser
195 200 205
Thr Ser Met Phe Asp Met Arg Cys Glu Glu Glu Ala Ala Val Gln Pro
210 215 220
His Ser Arg Ala Arg Gln Glu Gln Leu Gln Leu Ile Asn Asn Gln Leu
225 230 235 240
Arg Glu Glu Asp Asp Lys Trp Gln Asp Asp Leu Ala Arg Trp Lys Ser
245 250 255
Arg Lys Arg Ser Val Ser Gln Asp Leu Ile Lys Lys Glu Glu Glu Arg
260 265 270
Lys Lys Met Glu Lys Leu Leu Ala Gly Glu Asp Gly Thr Ser Glu Arg
275 280 285
Arg Lys Ser Ile Lys Thr Tyr Arg Glu Ile Val Gln Glu Lys Glu Arg
290 295 300
Arg Glu Arg Glu Leu His Glu Ala Tyr Lys Asn Ala Arg Ser Gln Glu
305 310 315 320
Glu Ala Glu Gly Ile Leu Gln Gln Tyr Ile Glu Arg Phe Thr Ile Ser
325 330 335
Glu Ala Val Leu Glu Arg Leu Glu Met Pro Lys Ile Leu Glu Arg Ser
340 345 350
His Ser Thr Glu Pro Asn Leu Ser Ser Phe Leu Asn Asp Pro Asn Pro
355 360 365
Met Lys Tyr Leu Arg Gln Gln Ser Leu Pro Pro Pro Lys Phe Thr Ala

370	375	380
Thr Val Glu Thr Thr Ile Ala Arg Ala Ser Val Leu Asp Thr Ser Met		
385	390	395
Ser Ala Gly Ser Gly Ser Pro Ser Lys Thr Val Thr Pro Lys Ala Val		400
	405	410
Pro Met Leu Thr Pro Lys Pro Tyr Ser Gln Pro Lys Asn Ser Gln Asp		415
	420	425
Val Leu Lys Thr Phe Lys Val Asp Gly Lys Val Ser Val Asn Gly Glu		430
	435	440
Thr Val His Arg Glu Glu Glu Lys Glu Arg Glu Cys Pro Thr Val Ala		445
	450	455
Pro Ala His Ser Leu Thr Lys Ser Gln Met Phe Glu Gly Val Ala Arg		460
465	470	475
Val His Gly Ser Pro Leu Glu Leu Lys Gln Asp Asn Gly Ser Ile Glu		480
	485	490
Ile Asn Ile Lys Lys Pro Asn Ser Val Pro Gln Glu Leu Ala Ala Thr		495
	500	505
Thr Glu Lys Thr Glu Pro Asn Ser Gln Glu Asp Lys Asn Asp Gly Gly		510
	515	520
Lys Ser Arg Lys Gly Asn Ile Glu Leu Ala Ser Ser Glu Pro Gln His		525
	530	535
Phe Thr Thr Thr Val Thr Arg Cys Ser Pro Thr Val Ala Phe Val Glu		540
545	550	555
Phe Pro Ser Ser Pro Gln Leu Lys Asn Asp Val Ser Glu Glu Lys Asp		560
	565	570
Gln Lys Lys Pro Glu Asn Glu Met Ser Gly Lys Val Glu Leu Val Leu		575
	580	585
Ser Gln Lys Val Val Lys Pro Lys Ser Pro Glu Pro Glu Ala Thr Leu		590
	595	600
Thr Phe Pro Phe Leu Asp Lys Met Pro Glu Ala Asn Gln Leu His Leu		605
	610	615
Pro Asn Leu Asn Ser Gln Val Asp Ser Pro Ser Ser Glu Lys Ser Pro		620
625	630	635
Val Thr Thr Pro Phe Lys Phe Trp Ala Trp Asp Pro Glu Glu Glu Arg		640
	645	650
Arg Arg Gln Glu Lys Trp Gln Gln Glu Gln Glu Arg Leu Leu Gln Glu		655
	660	665
Arg Tyr Gln Lys Glu Gln Asp Lys Leu Lys Glu Glu Trp Glu Lys Ala		670
	675	680
Gln Lys Glu Val Glu Glu Glu Glu Arg Arg Tyr Tyr Glu Glu Glu Pro		685
	690	695
Xaa Ile Ile Glu Asp Pro Val Val Pro Phe Thr Val Ser Ser Ser Ser		700
705	710	715
Ala Asp Gln Leu Ser Thr Ser Ser Ser Met Thr Glu Gly Ser Gly Thr		720
	725	730
Met Asn Lys Ile Asp Leu Gly Asn Cys Gln Asp Glu Lys Gln Asp Arg		735
	740	745
Arg Trp Lys Lys Ser Phe Gln Gly Asp Asp Ser Asp Leu Leu Leu Lys		750
	755	760
Thr Arg Glu Ser Asp Arg Leu Glu Glu Lys Gly Ser Leu Thr Glu Gly		765
	770	775
Ala Leu Ala His Ser Gly Asn Pro Val Ser Lys Gly Val His Glu Asp		780
785	790	795
His Gln Leu Asp Thr Glu Ala Gly Ala Pro His Cys Gly Thr Asn Pro		800
	805	810
Gln Leu Ala Gln Asp Pro Ser Gln Asn Gln Gln Thr Ser Asn Pro Thr		815
	820	825
His Ser Ser Glu Asp Val Lys Pro Lys Thr Leu Pro Leu Asp Lys Ser		830
	835	840
Ile Asn His Gln Ile Glu Ser Pro Ser Glu Arg Arg Lys Ser Ile Ser		845
	850	855
Gly Lys Lys Leu Cys Ser Ser Cys Gly Leu Pro Leu Gly Lys Gly Ala		860
865	870	875
Ala Met Ile Ile Glu Thr Leu Asn Leu Tyr Phe His Ile Gln Cys Phe		880

```

      885      890      895
Arg Cys Gly Ile Cys Lys Gly Gln Leu Gly Asp Ala Val Ser Gly Thr
      900      905      910
Asp Val Arg Ile Arg Asn Gly Leu Leu Asn Cys Asn Asp Cys Tyr Met
      915      920      925
Arg Ser Arg Ser Ala Gly Gln Pro Thr Thr Leu
      930      935      939

```

```

<210> 3359
<211> 123
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(122)
<223> Xaa = any amino acid or nothing

```

```

<400> 3359
Glu Val Thr Ala Ser Arg Glu Gly Arg Gly Ala Cys Ala Trp Glu Cys
 1          5          10          15
Gly Ser Ser Arg Gly Pro Trp Gly Leu Leu Arg Gly Thr Phe Ala Pro
      20      25      30
Val Arg Ala Ala Thr Pro Xaa Ser Xaa Leu Pro Lys Gly Ser Leu Arg
      35      40      45
His Arg Pro Xaa Cys Pro Pro Val His Leu Pro Pro Lys Ser Ser
      50      55      60
Cys Pro Pro Arg Ala Trp Ala Gly Arg Ala Thr Ser Met Xaa Thr Ser
      65      70      75      80
Ser Tyr Ser Ser Glu Tyr Gln Pro Gln Thr Pro Xaa Ala Leu Val Thr
      85      90      95
Leu Pro Pro Arg Ser Tyr Tyr Leu Leu Thr His Leu Leu Thr Leu Thr
      100      105      110
His Leu His His Gln Ile Leu Phe Glu Pro
      115      120      122

```

```

<210> 3360
<211> 131
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(129)
<223> Xaa = any amino acid or nothing

```

```

<400> 3360
Ala Arg Gly Ile Gly Ser Leu Gly Arg Asp His Ser Gly Ser Gly Gly
 1          5          10          15
Gly Thr Gly Met Ala Gly Ala Trp Val Arg Lys Ala Ala Asp Tyr Val
      20      25      30
Arg Ser Lys Asp Phe Arg Asp Tyr Leu Met Ser Thr His Phe Trp Gly
      35      40      45
Pro Val Ala Asn Trp Gly Leu Pro Ile Ala Ala Ile Thr Asp Met Lys
      50      55      60
Lys Ser Pro Glu Ile Ile Ser Arg Arg Met Thr Phe Ala Leu Xaa Cys
      65      70      75      80
Tyr Ser Leu Thr Phe Val Arg Phe Ala His Tyr Val Gln Pro Trp Asn
      85      90      95
Trp Leu Met Leu Gly Cys His Thr Ala Val Asp Phe Asp Gln Leu Ile

```

			100					105				110			
Ser	Ser	Met	Pro	Cys	Ile	Ser	His	Gly	Met	Thr	Ala	Ser	Ala	Ser	Ala
		115					120					125			
Leu															
129															

<210> 3361

<211> 1371

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(1357)

<223> Xaa = any amino acid or nothing

<400> 3361

Leu	Leu	Leu	Gly	Arg	Ala	Asn	Ser	Pro	Pro	Tyr	Asn	Ser	Val	Val	Arg
1				5					10					15	
Thr	Leu	Pro	Pro	Ala	Thr	Leu	Leu	Leu	Arg	Arg	Ala	Gly	Trp	Glu	Ser
			20					25					30		
Phe	Trp	Ser	Cys	Gln	Ser	Arg	Ser	Pro	Trp	Pro	Pro	Arg	Pro	Glu	Val
		35					40					45			
Arg	Ala	Pro	Ala	Lys	Gly	Pro	Arg	Gly	Val	Ala	Gly	Ala	Ala	Gly	Ala
	50					55					60				
Cys	Ser	Ala	Gly	Ala	Arg	Leu	Gly	Asp	Ala	Ala	Gly	Gly	Asp	Pro	Ala
	65				70					75				80	
Ser	Gly	Gln	Ala	Ala	Arg	Gly	Cys	Gly	Ala	Arg	Ala	Pro	Arg	Gly	Leu
				85					90					95	
Gly	Arg	Thr	Ala	Arg	Ala	Arg	Asp	Thr	Ala	Met	Glu	Asp	Ala	Gly	Ala
		100						105					110		
Ala	Gly	Pro	Gly	Pro	Glu	Pro	Glu	Pro	Glu	Pro	Glu	Pro	Glu	Pro	Glu
		115					120					125			
Pro	Ala	Pro	Glu	Pro	Glu	Pro	Glu	Pro	Lys	Pro	Gly	Ala	Gly	Thr	Ser
		130				135					140				
Glu	Ala	Phe	Ser	Arg	Leu	Trp	Thr	Asp	Val	Met	Gly	Ile	Leu	Asp	Gly
	145				150					155				160	
Ser	Leu	Gly	Asn	Ile	Asp	Asp	Leu	Ala	Gln	Gln	Tyr	Ala	Asp	Tyr	Tyr
			165					170					175		
Asn	Thr	Cys	Phe	Ser	Asp	Val	Cys	Glu	Arg	Met	Glu	Glu	Leu	Arg	Lys
		180						185					190		
Arg	Arg	Val	Ser	Gln	Asp	Leu	Glu	Val	Glu	Lys	Pro	Asp	Ala	Ser	Pro
		195					200					205			
Thr	Ser	Leu	Gln	Leu	Arg	Ser	Gln	Ile	Glu	Glu	Ser	Leu	Gly	Phe	Cys
	210					215					220				
Ser	Ala	Val	Ser	Thr	Pro	Glu	Val	Glu	Arg	Lys	Asn	Pro	Leu	His	Lys
	225				230					235				240	
Ser	Asn	Ser	Glu	Asp	Ser	Ser	Val	Gly	Lys	Gly	Asp	Trp	Lys	Lys	Lys
			245					250					255		
Asn	Lys	Tyr	Phe	Trp	Gln	Asn	Phe	Arg	Lys	Asn	Gln	Lys	Gly	Ile	Met
		260						265					270		
Arg	Gln	Thr	Ser	Lys	Gly	Glu	Asp	Val	Gly	Tyr	Val	Ala	Ser	Glu	Ile
		275					280					285			
Thr	Met	Ser	Asp	Glu	Glu	Arg	Ile	Gln	Leu	Met	Met	Met	Val	Lys	Glu
	290					295					300				
Lys	Met	Ile	Thr	Ile	Glu	Glu	Ala	Leu	Ala	Arg	Leu	Lys	Glu	Tyr	Glu
	305				310					315				320	
Ala	Gln	His	Arg	Gln	Ser	Ala	Ala	Leu	Asp	Pro	Ala	Asp	Trp	Pro	Asp
			325						330					335	
Gly	Ser	Tyr	Pro	Thr	Phe	Asp	Gly	Ser	Ser	Asn	Cys	Asn	Ser	Arg	Glu
		340						345				350			
Gln	Ser	Asp	Asp	Glu	Thr	Glu	Glu	Ser	Val	Lys	Phe	Lys	Arg	Leu	His

355	360	365
Lys Leu Val Asn Ser Thr Arg Arg Val Arg Lys Lys Leu Ile Arg Val		
370	375	380
Glu Glu Met Lys Lys Pro Ser Thr Glu Gly Gly Glu Glu His Val Phe		
385	390	395
Glu Asn Ser Pro Val Leu Asp Glu Arg Ser Ala Leu Tyr Ser Gly Val		400
	405	410
His Lys Lys Pro Leu Phe Phe Asp Gly Ser Pro Glu Lys Pro Pro Glu		415
	420	425
Asp Asp Ser Asp Ser Leu Thr Thr Ser Pro Ser Ser Ser Ser Leu Asp		430
435	440	445
Thr Trp Gly Ala Gly Arg Lys Leu Val Lys Thr Phe Ser Lys Gly Glu		
450	455	460
Ser Arg Gly Leu Ile Lys Pro Pro Lys Lys Met Gly Thr Phe Phe Ser		
465	470	475
Tyr Pro Glu Glu Glu Lys Ala Gln Lys Val Ser Arg Ser Leu Thr Glu		480
	485	490
Gly Glu Met Lys Lys Gly Leu Gly Ser Leu Ser His Gly Arg Thr Cys		495
	500	505
Ser Phe Gly Gly Phe Asp Leu Thr Asn Arg Ser Leu His Val Gly Ser		510
	515	520
Asn Asn Ser Asp Pro Met Gly Lys Glu Gly Asp Phe Val Tyr Lys Glu		525
530	535	540
Val Ile Lys Ser Pro Thr Ala Ser Arg Ile Ser Leu Gly Lys Lys Val		
545	550	555
Lys Ser Val Lys Glu Thr Met Arg Lys Arg Met Ser Lys Lys Tyr Ser		560
	565	570
Ser Ser Val Ser Glu Gln Asp Ser Gly Leu Asp Gly Met Pro Gly Ser		575
	580	585
Pro Pro Pro Ser Gln Pro Asp Pro Glu His Leu Asp Lys Pro Lys Leu		590
	595	600
Lys Ala Gly Gly Ser Val Glu Ser Leu Arg Ser Ser Leu Ser Gly Gln		605
610	615	620
Ser Ser Met Ser Gly Gln Thr Val Ser Thr Thr Asp Ser Ser Thr Ser		
625	630	635
Asn Arg Glu Ser Val Lys Ser Glu Asp Gly Asp Asp Glu Glu Pro Pro		640
	645	650
Tyr Arg Gly Pro Phe Cys Gly Arg Ala Arg Val His Thr Asp Phe Thr		655
	660	665
Pro Ser Pro Tyr Asp Thr Asp Ser Leu Lys Leu Lys Lys Gly Asp Ile		670
	675	680
Ile Asp Ile Ile Ser Lys Pro Pro Met Gly Thr Trp Met Gly Leu Leu		685
690	695	700
Asn Asn Lys Val Gly Thr Phe Asn Phe Ile Tyr Val Asp Val Leu Ser		
705	710	715
Glu Asp Glu Glu Lys Pro Lys Arg Pro Thr Arg Arg Arg Arg Lys Gly		720
	725	730
Arg Pro Pro Gln Pro Lys Ser Val Glu Asp Leu Leu Asp Arg Ile Asn		735
	740	745
Leu Lys Glu His Met Pro Thr Phe Leu Phe Asn Gly Tyr Glu Asp Leu		750
	755	760
Asp Thr Phe Lys Leu Leu Glu Glu Glu Asp Leu Asp Glu Leu Asn Ile		765
770	775	780
Arg Asp Pro Glu His Arg Ala Asp Leu Leu Thr Ala Val Glu Leu Leu		
785	790	795
Gln Glu Tyr Asp Ser Asn Ser Asp Gln Ser Gly Ser Gln Glu Lys Leu		800
	805	810
Leu Val Asp Ser Gln Gly Leu Ser Gly Cys Ser Pro Arg Asp Ser Xaa		815
	820	825
Cys Tyr Glu Ser Ser Glu Asn Leu Glu Asn Gly Lys Thr Arg Lys Ala		830
835	840	845
Ser Leu Leu Ser Ala Lys Ser Ser Thr Glu Pro Ser Leu Lys Ala Phe		
850	855	860
Ser Arg Asn Gln Leu Gly Asn Tyr Pro Thr Leu Pro Leu Met Lys Ser		

865		870		875		880
Gly Asp Ala Leu Lys Gln Gly Gln Glu Glu Gly Arg Leu Gly Gly Gly						
	885			890		895
Leu Ala Pro Asp Thr Ser Lys Ser Cys Asp Pro Pro Gly Cys Xaa Leu						
	900			905		910
Val Leu Asn Lys Asn Arg Arg Lys Pro Pro Ser Phe Pro Ser Cys Arg						
	915		920			925
Ser Cys Glu Thr Leu Glu Gly Pro Gln Thr Val Asp Thr Trp Pro Arg						
	930		935			940
Ser His Ser Leu Asp Asp Leu Gln Val Glu Pro Gly Ala Glu Gln Asp						
	945		950			955
Val Pro Thr Glu Val Thr Glu Pro Pro Pro Gln Ile Val Pro Glu Val						
		965		970		975
Pro Gln Lys Thr Thr Ala Ser Ser Thr Lys Ala Gln Pro Leu Glu Gln						
	980		985			990
Asp Ser Ala Val Asp Asn Ala Leu Leu Leu Thr Gln Ser Lys Arg Phe						
	995		1000			1005
Ser Glu Pro Gln Lys Leu Thr Thr Lys Lys Leu Glu Gly Ser Ile Ala						
	1010		1015			1020
Ala Ser Gly Arg Gly Leu Ser Pro Pro Gln Cys Leu Pro Arg Asn Tyr						
	1025		1030			1035
Asp Ala Gln Pro Pro Gly Ala Lys His Gly Leu Ala Arg Thr Pro Leu						
		1045		1050		1055
Glu Gly His Arg Lys Gly His Glu Phe Glu Gly Thr His His Pro Leu						
		1060		1065		1070
Gly Thr Lys Glu Gly Val Asp Ala Glu Gln Arg Met Gln Pro Lys Ile						
	1075		1080			1085
Pro Ser Gln Pro Pro Pro Val Pro Ala Lys Lys Ser Arg Glu Arg Leu						
	1090		1095			1100
Ala Asn Gly Leu His Pro Val Pro Met Gly Pro Ser Gly Ala Leu Pro						
	1105		1110			1115
Ser Pro Asp Ala Pro Cys Leu Pro Val Lys Arg Gly Ser Pro Ala Ser						
		1125		1130		1135
Pro Thr Ser Pro Ser Asp Cys Pro Pro Ala Leu Ala Pro Arg Pro Leu						
		1140		1145		1150
Ser Gly Gln Ala Leu Gly Ser Pro Pro Ser Thr Arg Pro Pro Pro Trp						
	1155		1160			1165
Leu Ser Glu Leu Pro Glu Asn Thr Ser Leu Gln Glu His Gly Val Lys						
	1170		1175			1180
Leu Gly Pro Ala Leu Thr Arg Lys Val Ser Cys Ala Arg Gly Val Asp						
	1185		1190			1195
Leu Glu Thr Leu Thr Glu Asn Lys Leu His Ala Glu Gly Ile Arg Ser						
		1205		1210		1215
Ser Arg Arg Glu Pro Tyr Ser Xaa Leu Arg His Gly Arg Cys Gly Ile						
		1220		1225		1230
Pro Glu Ala Leu Val Gln Arg Tyr Ala Glu Asp Leu Asp Gln Pro Glu						
	1235		1240			1245
Arg Asp Val Ala Ala Asn Met Asp Gln Ile Arg Val Lys Gln Leu Arg						
	1250		1255			1260
Lys Gln His Arg Met Ala Ile Pro Ser Gly Gly Leu Thr Glu Ile Cys						
	1265		1270			1275
Arg Lys Pro Val Ser Pro Gly Cys Ile Ser Ser Val Ser Asp Trp Leu						
		1285		1290		1295
Ile Ser Ile Gly Leu Pro Met Tyr Ala Gly Thr Leu Ser Thr Ala Gly						
		1300		1305		1310
Phe Ser Thr Leu Ser Gln Val Pro Ser Leu Ser His Thr Cys Leu Gln						
	1315		1320			1325
Glu Ala Gly Ile Thr Glu Glu Arg His Ile Arg Lys Leu Leu Ser Ala						
	1330		1335			1340
Ala Arg Leu Phe Lys Leu Pro Pro Gly Pro Glu Ala Met						
1345		1350		1355		1357

<210> 3362
 <211> 1553
 <212> PRT
 <213> Homo sapiens

<221> misc_feature
 <222> (1)...(1550)
 <223> Xaa = any amino acid or nothing

<400> 3362
 Phe Arg Gly Gly Val Gly Tyr Ala His Thr Leu His Leu Leu Pro Phe
 1 5 10 15
 Ala Gly Ser Ser Val Val Leu Ala Arg Ala Arg Arg Thr Asp Arg Trp
 20 25 30
 Thr Ser Gly Leu Val Glu Met Ala Thr Leu Ser Leu Thr Val Asn Ser
 35 40 45
 Gly Asp Pro Pro Leu Gly Ala Leu Leu Ala Val Glu His Val Lys Asp
 50 55 60
 Asp Val Ser Ile Ser Val Glu Glu Gly Lys Glu Asn Ile Leu His Val
 65 70 75 80
 Ser Glu Asn Val Ile Phe Thr Asp Val Asn Ser Ile Leu Arg Tyr Leu
 85 90 95
 Ala Arg Val Ala Thr Thr Ala Gly Leu Tyr Gly Ser Asn Leu Met Glu
 100 105 110
 His Thr Glu Ile Asp His Trp Leu Glu Phe Ser Ala Thr Lys Leu Ser
 115 120 125
 Ser Cys Asp Ser Phe Thr Ser Thr Ile Asn Glu Leu Asn His Cys Leu
 130 135 140
 Ser Leu Arg Thr Tyr Leu Val Gly Asn Ser Leu Ser Leu Ala Asp Leu
 145 150 155 160
 Cys Val Trp Ala Thr Leu Lys Gly Asn Ala Ala Trp Gln Glu Gln Leu
 165 170 175
 Lys Gln Lys Lys Ala Pro Val His Val Lys Arg Trp Phe Gly Phe Leu
 180 185 190
 Glu Ala Gln Gln Ala Phe Gln Ser Val Gly Thr Lys Trp Asp Val Ser
 195 200 205
 Thr Thr Lys Ala Arg Val Ala Pro Glu Lys Lys Gln Asp Val Gly Lys
 210 215 220
 Phe Val Glu Leu Pro Gly Ala Glu Met Gly Lys Val Thr Val Arg Phe
 225 230 235 240
 Pro Pro Glu Ala Ser Gly Tyr Leu His Ile Gly His Ala Lys Ala Ala
 245 250 255
 Leu Leu Asn Gln His Tyr Gln Val Asn Phe Lys Gly Lys Leu Ile Met
 260 265 270
 Arg Phe Asp Asp Thr Asn Pro Glu Lys Glu Lys Glu Asp Phe Glu Lys
 275 280 285
 Val Ile Leu Glu Asp Val Ala Met Leu His Ile Lys Pro Asp Gln Phe
 290 295 300
 Thr Tyr Thr Ser Asp His Phe Glu Thr Ile Met Lys Tyr Ala Glu Lys
 305 310 315 320
 Leu Ile Gln Glu Gly Lys Ala Tyr Val Asp Asp Thr Pro Gly Glu Gln
 325 330 335
 Ile Lys Ala Glu Arg Glu Gln Arg Ile Glu Ser Lys His Arg Lys Asn
 340 345 350
 Pro Ile Glu Lys Asn Leu Gln Met Trp Glu Glu Met Lys Lys Gly Ser
 355 360 365
 Gln Phe Gly His Ser Cys Cys Leu Arg Ala Lys Ile Asp Met Ser Ser
 370 375 380
 Asn Asn Gly Cys Met Arg Asp Pro Thr Leu Tyr Arg Cys Lys Ile Gln
 385 390 395 400
 Pro His Pro Arg Thr Gly Asn Xaa Tyr Asn Val Tyr Pro Thr Tyr Asp
 405 410 415
 Phe Ala Cys Pro Ile Val Asp Ser Ile Glu Gly Val Thr His Ala Leu

				420						425				430		
Arg	Thr	Thr	Glu	Tyr	His	Asp	Arg	Asp	Glu	Gln	Phe	Tyr	Trp	Ile	Ile	
		435						440				445				
Glu	Ala	Leu	Gly	Ile	Arg	Lys	Pro	Tyr	Ile	Trp	Glu	Tyr	Ser	Arg	Leu	
	450					455					460					
Asn	Leu	Asn	Asn	Thr	Val	Leu	Ser	Lys	Arg	Lys	Leu	Thr	Trp	Phe	Val	
465					470					475					480	
Asn	Glu	Gly	Leu	Val	Asp	Gly	Trp	Asp	Asp	Pro	Arg	Phe	Pro	Thr	Val	
				485					490						495	
Arg	Gly	Val	Leu	Arg	Arg	Gly	Met	Thr	Val	Glu	Gly	Leu	Lys	Gln	Phe	
			500					505					510			
Ile	Ala	Ala	Gln	Gly	Ser	Ser	Arg	Ser	Val	Val	Asn	Met	Glu	Trp	Asp	
		515					520					525				
Lys	Ile	Trp	Ala	Phe	Asn	Lys	Lys	Val	Ile	Asp	Pro	Val	Ala	Pro	Arg	
	530					535					540					
Tyr	Val	Ala	Leu	Leu	Lys	Lys	Glu	Val	Ile	Pro	Val	Asn	Val	Pro	Glu	
545					550					555					560	
Ala	Gln	Glu	Glu	Met	Lys	Glu	Val	Ala	Lys	His	Pro	Lys	Asn	Pro	Glu	
				565					570						575	
Val	Gly	Leu	Lys	Pro	Val	Trp	Tyr	Ser	Pro	Lys	Val	Phe	Ile	Glu	Gly	
			580					585					590			
Ala	Asp	Ala	Glu	Thr	Phe	Ser	Glu	Gly	Glu	Met	Val	Thr	Phe	Ile	Asn	
	595						600					605				
Trp	Gly	Asn	Leu	Asn	Ile	Thr	Lys	Ile	His	Lys	Asn	Ala	Asp	Gly	Lys	
	610					615					620					
Ile	Ile	Ser	Leu	Asp	Ala	Lys	Leu	Asn	Leu	Glu	Asn	Lys	Asp	Tyr	Lys	
625					630					635					640	
Lys	Thr	Thr	Lys	Val	Thr	Trp	Leu	Ala	Glu	Thr	Thr	His	Ala	Leu	Pro	
			645						650					655		
Ile	Pro	Val	Ile	Cys	Val	Thr	Tyr	Glu	His	Leu	Ile	Thr	Lys	Pro	Val	
			660					665					670			
Leu	Gly	Lys	Asp	Glu	Asp	Phe	Lys	Gln	Tyr	Val	Asn	Lys	Asn	Ser	Lys	
	675						680					685				
His	Glu	Glu	Leu	Met	Leu	Gly	Asp	Pro	Cys	Leu	Lys	Asp	Leu	Lys	Lys	
	690					695					700					
Gly	Asp	Ile	Ile	Gln	Leu	Gln	Arg	Arg	Gly	Phe	Phe	Ile	Cys	Asp	Gln	
705					710					715					720	
Pro	Tyr	Glu	Pro	Val	Ser	Pro	Tyr	Ser	Cys	Lys	Glu	Ala	Pro	Cys	Val	
			725						730					735		
Leu	Ile	Tyr	Ile	Pro	Asp	Gly	His	Thr	Lys	Glu	Met	Pro	Thr	Ser	Gly	
			740					745					750			
Ser	Lys	Glu	Lys	Thr	Lys	Val	Glu	Ala	Thr	Lys	Asn	Glu	Thr	Ser	Ala	
	755						760					765				
Pro	Phe	Lys	Glu	Arg	Pro	Thr	Pro	Ser	Leu	Asn	Asn	Asn	Cys	Thr	Thr	
	770					775					780					
Ser	Glu	Asp	Ser	Leu	Val	Leu	Tyr	Asn	Arg	Val	Ala	Val	Gln	Gly	Asp	
785					790				795						800	
Val	Val	Arg	Glu	Leu	Lys	Ala	Lys	Lys	Ala	Pro	Lys	Glu	Asp	Val	Asp	
				805					810					815		
Ala	Ala	Val	Lys	Gln	Leu	Leu	Ser	Leu	Lys	Ala	Glu	Tyr	Lys	Glu	Lys	
			820					825					830			
Thr	Gly	Gln	Glu	Tyr	Lys	Pro	Gly	Asn	Pro	Pro	Ala	Glu	Ile	Gly	Gln	
		835					840					845				
Asn	Ile	Ser	Ser	Asn	Ser	Ser	Ala	Ser	Ile	Leu	Glu	Ser	Lys	Ser	Leu	
	850					855					860					
Tyr	Asp	Glu	Val	Ala	Ala	Gln	Gly	Glu	Val	Val	Arg	Lys	Leu	Lys	Ala	
865					870					875					880	
Glu	Lys	Ser	Pro	Lys	Ala	Lys	Ile	Asn	Glu	Ala	Val	Glu	Cys	Leu	Leu	
				885					890					895		
Ser	Leu	Lys	Ala	Gln	Tyr	Lys	Glu	Lys	Thr	Gly	Lys	Glu	Tyr	Ile	Pro	
			900					905					910			
Gly	Gln	Pro	Pro	Leu	Ser	Gln	Ser	Ser	Asp	Ser	Ser	Pro	Thr	Arg	Asn	
		915					920					925				
Ser	Glu	Pro	Ala	Gly	Leu	Glu	Thr	Pro	Glu	Ala	Lys	Val	Leu	Phe	Asp	

930	935	940
Lys Val Ala Ser Gln Gly	Glu Val Val Arg Lys	Leu Lys Thr Glu Lys
945	950	955
Ala Pro Lys Asp Gln Val	Asp Ile Ala Val Gln	Glu Leu Leu Gln Leu
965	970	975
Lys Ala Gln Tyr Lys Ser	Leu Ile Gly Val Glu Tyr	Lys Pro Val Ser
980	985	990
Ala Thr Gly Ala Glu Asp	Lys Asp Lys Lys Lys	Glu Lys Glu Asn
995	1000	1005
Lys Ser Glu Lys Gln Asn	Lys Pro Gln Lys Gln	Asn Asp Gly Gln Arg
1010	1015	1020
Lys Asp Pro Ser Lys Asn	Gln Gly Gly Gly Leu	Ser Ser Ser Gly Ala
1025	1030	1035
Gly Glu Gly Gln Gly Pro	Lys Lys Gln Thr Arg	Leu Gly Leu Glu Ala
1045	1050	1055
Lys Lys Glu Glu Asn Leu	Ala Asp Trp Tyr Ser	Gln Val Ile Thr Lys
1060	1065	1070
Ser Glu Met Ile Glu Tyr	His Asp Ile Ser Gly	Cys Tyr Ile Leu Arg
1075	1080	1085
Pro Trp Ala Tyr Ala Ile	Trp Glu Ala Ile Lys	Asp Phe Phe Asp Ala
1090	1095	1100
Glu Ile Lys Lys Leu Gly	Val Glu Asn Cys Tyr	Phe Pro Met Phe Val
1105	1110	1115
Ser Gln Ser Ala Leu Glu	Lys Glu Lys Thr His	Val Ala Asp Phe Ala
1125	1130	1135
Pro Glu Val Ala Trp Val	Thr Arg Ser Gly Lys	Thr Glu Leu Ala Glu
1140	1145	1150
Pro Ile Ala Ile Arg Pro	Thr Ser Glu Thr Val	Met Tyr Pro Ala Tyr
1155	1160	1165
Ala Lys Trp Val Gln Ser	His Arg Asp Leu Pro	Ile Lys Leu Asn Gln
1170	1175	1180
Trp Cys Asn Val Val Arg	Trp Glu Phe Lys His	Pro Gln Pro Phe Leu
1185	1190	1195
Arg Thr Arg Glu Phe Leu	Trp Gln Glu Gly His	Ser Ala Phe Ala Thr
1205	1210	1215
Met Glu Glu Ala Ala Glu	Glu Val Leu Gln Ile	Leu Asp Leu Tyr Ala
1220	1225	1230
Gln Val Tyr Glu Glu Leu	Leu Ala Ile Pro Val	Val Lys Gly Arg Lys
1235	1240	1245
Thr Glu Lys Glu Lys Phe	Ala Gly Gly Asp Tyr	Thr Thr Thr Ile Glu
1250	1255	1260
Ala Phe Ile Ser Ala Ser	Gly Arg Ala Ile Gln	Gly Gly Thr Ser His
1265	1270	1275
His Leu Gly Gln Asn Phe	Ser Lys Met Phe Glu	Ile Val Phe Glu Asp
1285	1290	1295
Pro Lys Ile Pro Gly Glu	Lys Gln Phe Ala Tyr	Gln Asn Ser Trp Gly
1300	1305	1310
Leu Thr Thr Arg Thr Ile	Gly Val Met Thr Met	Val His Gly Asp Asn
1315	1320	1325
Met Gly Leu Val Leu Pro	Pro Arg Val Ala Cys	Val Gln Val Val Ile
1330	1335	1340
Ile Pro Cys Gly Ile Thr	Asn Ala Leu Ser Glu	Glu Asp Lys Glu Ala
1345	1350	1355
Leu Ile Ala Lys Cys Asn	Asp Tyr Arg Arg Arg	Leu Leu Ser Val Asn
1365	1370	1375
Ile Arg Val Arg Ala Asp	Leu Arg Asp Asn Tyr	Ser Pro Gly Trp Lys
1380	1385	1390
Phe Asn His Trp Glu Leu	Lys Gly Val Pro Ile	Arg Leu Glu Val Gly
1395	1400	1405
Pro Arg Asp Met Lys Ser	Cys Gln Phe Val Ala	Val Arg Arg Asp Thr
1410	1415	1420
Gly Glu Lys Leu Thr Val	Ala Glu Asn Glu Ala	Glu Thr Lys Leu Gln
1425	1430	1435
Ala Ile Leu Glu Asp Ile	Gln Val Thr Leu Phe	Thr Arg Ala Ser Glu

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1445      1450      1455
Asp Leu Lys Thr His Met Val Val Ala Asn Thr Met Glu Asp Phe Gln
1460      1465      1470
Lys Ile Leu Asp Ser Gly Lys Ile Val Gln Ile Pro Phe Cys Gly Glu
1475      1480      1485
Ile Asp Cys Glu Asp Trp Ile Lys Lys Thr Thr Ala Arg Asp Gln Asp
1490      1495      1500
Leu Glu Pro Gly Ala Pro Ser Met Gly Ala Lys Ser Leu Cys Ile Pro
1505      1510      1515      1520
Phe Lys Pro Leu Cys Glu Leu Gln Pro Gly Ala Lys Cys Val Cys Gly
1525      1530      1535
Lys Asn Pro Ala Lys Tyr Tyr Thr Leu Phe Gly Arg Ser Tyr
1540      1545      1550

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<210> 3363

<211> 767

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(760)

<223> Xaa = any amino acid or nothing

<400> 3363

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Leu Gly Gly Ala Ala Pro Glu Thr Met Pro Phe Pro Val Thr Thr Gln
1      5      10      15
Gly Ser Gln Gln Thr Gln Pro Pro Gln Lys His Tyr Gly Ile Thr Ser
20      25      30
Pro Ile Ser Leu Ala Ala Pro Lys Glu Thr Asp Cys Val Leu Thr Gln
35      40      45
Lys Leu Ile Glu Thr Leu Lys Pro Phe Gly Gly Phe Leu Lys Lys Glu
50      55      60
Glu Gly Thr Ala Ser Arg Arg Asn Phe Asn Phe Gly Lys Asn Xaa Ile
65      70      75      80
Asn Leu Val Lys Glu Trp Ile Arg Arg Asn Gln Xaa Lys Ala Lys Asn
85      90      95
Leu Pro Gln Ser Val Ile Glu Asn Val Gly Gly Lys Ile Phe Thr Phe
100      105      110
Leu Gly Ser Tyr Arg Leu Gly Glu Val His Thr Lys Gly Ala Asp Ile
115      120      125
Asp Gly Val Cys Val Phe Ala Pro Arg His Val Asp Arg Ser Asp Phe
130      135      140
Phe Thr Ser Phe Tyr Asp Lys Leu Lys Leu Gln Glu Glu Val Lys Asp
145      150      155      160
Leu Arg Ala Val Glu Glu Ala Phe Val Pro Val Ile Lys Leu Cys Phe
165      170      175
Asp Gly Ile Glu Ile Asp Ile Leu Phe Ala Arg Leu Ala Leu Gln Thr
180      185      190
Ile Pro Glu Asp Leu Asp Leu Arg Asp Asp Ser Leu Leu Lys Asn Leu
195      200      205
Asp Ile Arg Cys Ile Arg Ser Leu Asn Gly Cys Arg Val Thr Asp Glu
210      215      220
Ile Leu His Leu Val Pro Asn Ile Asp Asn Phe Arg Leu Thr Leu Arg
225      230      235      240
Ala Ile Lys Leu Trp Ala Lys Arg His Asn Ile Tyr Ser Asn Ile Leu
245      250      255
Gly Phe Leu Gly Gly Val Ser Trp Ala Met Leu Val Ala Arg Thr Cys
260      265      270
Gln Leu Tyr Pro Asn Ala Ile Ala Ser Thr Leu Val His Lys Phe Phe
275      280      285
Leu Val Phe Ser Lys Trp Glu Trp Pro Asn Pro Val Leu Leu Lys Gln

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290	295	300
Pro Glu Glu Cys Asn Leu Asn Leu Pro Val Trp Asp Pro Arg Val Asn		
305	310	315
Pro Ser Asp Arg Tyr His Leu Met Pro Ile Ile Thr Pro Ala Tyr Pro		320
	325	330
Gln Gln Asn Ser Thr Tyr Asn Val Ser Val Ser Thr Arg Met Val Met		335
	340	345
Val Glu Glu Phe Lys Gln Gly Leu Ala Ile Thr Asp Glu Ile Leu Leu		350
	355	360
Ser Lys Ala Glu Trp Ser Lys Leu Phe Glu Ala Pro Asn Phe Phe Gln		365
	370	375
Lys Tyr Lys His Tyr Ile Val Leu Leu Ala Ser Ala Pro Thr Glu Asn		380
	385	390
Gln Arg Leu Glu Trp Val Gly Leu Val Glu Ser Lys Ile Arg Ile Leu		395
	405	410
Val Gly Ser Leu Glu Lys Asn Glu Phe Ile Thr Leu Ala His Val Asn		415
	420	425
Pro Gln Ser Phe Pro Ala Pro Lys Glu Asn Pro Asp Lys Glu Glu Phe		430
	435	440
Arg Thr Met Trp Val Ile Gly Leu Val Phe Lys Lys Thr Glu Asn Ser		445
	450	455
Glu Asn Leu Ser Val Asp Leu Thr Tyr Asp Ile Gln Ser Phe Thr Asp		460
	465	470
Thr Val Tyr Arg Gln Ala Ile Asn Ser Lys Met Phe Glu Val Asp Met		475
	485	490
Lys Ile Ala Ala Met His Val Lys Arg Lys Gln Leu His Gln Leu Leu		495
	500	505
Pro Asn His Val Leu Gln Lys Lys Lys His Ser Thr Glu Gly Val		510
	515	520
Lys Leu Thr Ala Leu Asn Asp Ser Ser Leu Asp Leu Ser Met Asp Ser		525
	530	535
Asp Asn Ser Met Ser Val Pro Ser Pro Thr Ser Ala Thr Lys Thr Ser		540
	545	550
Pro Leu Asn Ser Ser Gly Ser Ser Gln Gly Arg Asn Ser Pro Ala Pro		555
	565	570
Ala Val Thr Ala Ala Ser Val Thr Asn Ile Gln Ala Thr Glu Val Ser		575
	580	585
Val Pro Gln Val Asn Ser Ser Glu Ser Ser Gly Gly Thr Ser Ser Glu		590
	595	600
Ser Ile Pro Gln Thr Ala Thr Gln Pro Ala Ile Ser Pro Pro Pro Lys		605
	610	615
Pro Thr Val Ser Arg Val Val Ser Ser Thr Arg Leu Val Asn Pro Pro		620
	625	630
Pro Arg Ser Ser Gly Asn Ala Ala Thr Ser Gly Asn Ala Ala Thr Lys		635
	645	650
Ile Pro Thr Pro Ile Val Gly Val Lys Arg Thr Ser Ser Pro His Lys		655
	660	665
Glu Glu Ser Pro Lys Lys Thr Lys Thr Glu Glu Asp Glu Thr Ser Glu		670
	675	680
Asp Ala Asn Cys Leu Ala Leu Ser Gly His Asp Lys Thr Glu Ala Lys		685
	690	695
Glu Gln Leu Asp Thr Glu Thr Ser Thr Thr Gln Ser Glu Thr Ile Gln		700
	705	710
Thr Ala Ala Ser Leu Leu Ala Ser Gln Lys Thr Ser Ser Thr Asp Leu		715
	725	730
Ser Asp Ile Pro Ala Leu Pro Ala Asn Pro Ile Pro Val Ile Lys Asn		735
	740	745
Ser Ile Lys Leu Arg Leu Asn Arg		750
	755	760

<210> 3364

<211> 1014

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(1007)

<223> Xaa = any amino acid or nothing

<400> 3364

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Ser Ala Arg Thr Met Ser Tyr Asp Tyr His Gln Asn Trp Gly Arg Asp
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Gly Gly Pro Arg Ser Ser Gly Gly Gly Tyr Gly Gly Gly Pro Ala Gly
          20           25           30
Gly His Gly Gly Asn Arg Gly Ser Gly Gly Gly Gly Gly Gly Gly
          35           40           45
Gly Gly Arg Gly Trp Gln Gly Pro Ala Ser Arg Ala Pro Glu Arg Pro
          50           55           60
Arg Asn Arg His Val Val Arg Glu Lys Thr Gly Ala Glu Glu Gln Trp
 65           70           75           80
Lys Arg Arg Gly Lys Arg Glu Leu Leu Val His Met Asp Glu Arg Arg
          85           90           95
Glu Glu Gln Ile Val Gln Leu Leu Asn Ser Val Gln Ala Lys Asn Asp
          100          105          110
Lys Glu Ser Glu Ala Gln Ile Ser Trp Phe Ala Pro Glu Asp His Gly
          115          120          125
Tyr Gly Thr Glu Val Ser Thr Lys Asn Thr Pro Cys Ser Glu Asn Lys
          130          135          140
Leu Asp Ile Gln Glu Lys Lys Leu Ile Asn Gln Glu Lys Lys Met Phe
          145          150          155          160
Arg Ile Arg Asn Arg Ser Tyr Ile Asp Arg Asp Ser Glu Tyr Leu Leu
          165          170          175
Gln Glu Asn Glu Pro Asp Gly Thr Leu Asp Gln Lys Leu Leu Glu Asp
          180          185          190
Leu Gln Lys Lys Lys Asn Asp Leu Arg Tyr Ile Glu Met Gln His Phe
          195          200          205
Arg Glu Lys Leu Pro Ser Tyr Gly Met Gln Lys Glu Leu Val Asn Leu
          210          215          220
Ile Asp Asn His Gln Val Thr Val Ile Ser Gly Glu Thr Gly Cys Gly
          225          230          235          240
Lys Thr Thr Gln Val Thr Gln Phe Ile Leu Asp Asn Tyr Ile Glu Arg
          245          250          255
Gly Lys Gly Ser Ala Cys Arg Ile Val Cys Thr Gln Pro Arg Arg Ile
          260          265          270
Ser Ala Ile Ser Val Ala Glu Arg Val Ala Ala Glu Arg Ala Glu Ser
          275          280          285
Cys Gly Ser Gly Asn Ser Thr Gly Tyr Gln Ile Arg Leu Gln Ser Arg
          290          295          300
Leu Pro Arg Lys Gln Gly Ser Ile Leu Tyr Cys Thr Thr Gly Ile Ile
          305          310          315          320
Leu Gln Trp Leu Gln Ser Asp Pro Tyr Leu Ser Ser Val Ser His Ile
          325          330          335
Val Leu Asp Glu Ile His Glu Arg Asn Leu Gln Ser Asp Val Leu Met
          340          345          350
Thr Val Val Lys Asp Leu Leu Asn Phe Arg Ser Asp Leu Lys Val Ile
          355          360          365
Leu Met Ser Ala Thr Leu Asn Ala Glu Lys Phe Ser Glu Tyr Phe Gly
          370          375          380
Asn Cys Pro Met Ile His Ile Pro Gly Phe Thr Phe Pro Val Val Glu
          385          390          395          400
Tyr Leu Leu Glu Asp Val Ile Glu Lys Ile Arg Tyr Val Pro Glu Gln
          405          410          415
Lys Glu His Arg Cys Gln Phe Lys Arg Gly Phe Met Gln Gly His Val
          420          425          430
Asn Ser Gln Glu Lys Glu Glu Lys Glu Ala Ile Tyr Lys Glu Arg Trp

```

435	440	445
Pro Asp Tyr Val Arg Glu Leu Arg Arg Arg Tyr Ser Ala Ser Thr Val		
450	455	460
Asp Val Ile Glu Met Met Glu Asp Asp Lys Val Asp Leu Asn Leu Ile		
465	470	475
Val Ala Leu Ile Arg Tyr Ile Val Leu Glu Glu Asp Gly Ala Ile		480
	485	490
Leu Val Phe Leu Pro Gly Trp Asp Asn Ile Ser Thr Leu His Asp Leu		495
	500	505
Leu Met Ser Gln Val Met Phe Lys Ser Asp Lys Phe Leu Ile Ile Pro		510
	515	520
Leu His Ser Leu Met Pro Thr Val Asn Gln Thr Gln Val Phe Lys Arg		525
	530	535
Thr Pro Pro Gly Val Arg Lys Ile Val Ile Ala Thr Asn Ile Ala Glu		540
545	550	555
Thr Ser Ile Thr Ile Asp Asp Val Val Tyr Val Ile Asp Gly Gly Lys		560
	565	570
Ile Lys Glu Thr His Phe Asp Thr Gln Asn Asn Ile Ser Thr Met Ser		575
	580	585
Ala Glu Trp Val Ser Lys Ala Asn Ala Lys Gln Arg Lys Gly Arg Ala		590
	595	600
Gly Arg Val Gln Pro Gly Ser Leu Leu Phe Ile Cys Ile Asn Gly Ser		605
	610	615
Xaa Glu Ala Ser Leu Leu Gly Trp Thr Ile Gln Leu Pro Glu Ile Phe		620
625	630	635
Arg Gly Thr Pro Leu Glu Glu Leu Cys Leu Gln Ile Lys Val Leu Arg		640
	645	650
Leu Gly Gly Ile Gly Leu Phe Leu Ser Arg Leu Met Asp Pro Pro Ser		655
	660	665
Asn Glu Ala Val Leu Leu Ser Ile Arg Gln Leu Arg Ser Leu Asn Ala		670
	675	680
Leu Asp Lys Gln Glu Glu Leu Thr Pro Leu Gly Val His Leu Ala Arg		685
	690	695
Leu Pro Val Glu Pro His Ile Gly Lys Met Ile Leu Phe Gly Ala Leu		700
705	710	715
Phe Cys Cys Leu Asp Pro Val Leu Thr Ile Ala Ala Ser Leu Ser Phe		720
	725	730
Lys Asp Pro Phe Val Ile Pro Leu Gly Lys Glu Lys Ile Ala Asp Ala		735
	740	745
Arg Arg Lys Glu Leu Ala Lys Asp Thr Arg Ser Asp His Leu Thr Val		750
	755	760
Val Asn Ala Phe Glu Gly Trp Glu Glu Ala Arg Arg Gly Phe Arg		765
	770	775
Tyr Glu Lys Asp Tyr Cys Trp Glu Tyr Phe Leu Ser Ser Asn Thr Leu		780
785	790	795
Gln Met Leu His Asn Met Lys Gly Gln Phe Ala Glu His Leu Leu Gly		800
	805	810
Ala Gly Phe Val Ser Ser Arg Asn Pro Lys Asp Pro Glu Ser Asn Ile		815
	820	825
Asn Ser Asp Asn Glu Lys Ile Ile Lys Ala Val Ile Cys Ala Gly Leu		830
	835	840
Tyr Pro Lys Val Ala Lys Ile Arg Leu Asn Leu Gly Lys Lys Arg Lys		845
	850	855
Met Val Lys Val Tyr Thr Lys Thr Asp Gly Leu Val Ala Val His Pro		860
865	870	875
Lys Ser Val Asn Val Glu Gln Thr Asp Phe His Tyr Asn Trp Leu Ile		880
	885	890
Tyr His Leu Lys Met Arg Thr Ser Ser Ile Tyr Leu Tyr Asp Cys Thr		895
	900	905
Glu Val Ser Pro Tyr Cys Leu Leu Phe Phe Gly Gly Asp Ile Ser Ile		910
	915	920
Gln Lys Asp Asn Asp Gln Glu Thr Ile Ala Val Asp Glu Trp Ile Val		925
	930	935
Phe Gln Ser Pro Ala Arg Ile Ala His Leu Val Lys Arg Ala Val Val		940

```

945          950          955          960
His Met Asp Glu Arg Arg Glu Glu Gln Ile Val Gln Leu Leu Asn Ser
          965          970          975
Val Gln Ala Lys Asn Asp Lys Glu Ser Glu Ala Gln Ile Ser Trp Phe
          980          985          990
Ala Pro Glu Asp His Gly Tyr Asp Lys Lys Tyr Phe Phe Lys Glu
          995          1000          1005          1007

```

```

<210> 3365
<211> 147
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(146)
<223> Xaa = any amino acid or nothing

```

```

<400> 3365
Glu Cys Cys Asn Val Arg Pro Leu Arg Glu Thr Asp Leu Leu Lys Met
 1          5          10          15
Lys Arg Lys Pro Arg Ala Ser Ser Pro Val Val Glu Glu Gln Pro Arg
          20          25          30
Ala Asn Thr Lys Glu Thr Arg Lys Lys Lys Ser Phe Ser Gln Pro Met
          35          40          45
Ser Ala Ser Thr Lys Glu Glu Ser Gln Asp Gly Arg Arg Lys Gly Lys
          50          55          60
Xaa Leu Lys Gly Arg Ala Arg Lys Lys Asn Ala Pro Gln Lys Ser Met
          65          70          75          80
Ala Leu Arg Ile Leu Glu Glu Gly Ser Arg Pro Thr Pro Ser Gly His
          85          90          95
Ser Asp Gln Leu Asn Glu Glu Leu Xaa Gln Asn Glu Leu Gln Leu Glu
          100          105          110
Gln Pro Glu Gly Thr Xaa Leu Glu Gln Gln Ser Glu Gly Thr Gln Pro
          115          120          125
Glu Gln Gln Ser Gly Arg Met Pro Thr Ile Ser Thr Leu Ser Leu Ser
          130          135          140
Ser Glu
145 146

```

```

<210> 3366
<211> 276
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(275)
<223> Xaa = any amino acid or nothing

```

```

<400> 3366
Phe Arg Gly Tyr Trp Gly Val Arg Glu Ala Phe Thr Asp Ala Ser Trp
 1          5          10          15
Ser Gly Gly Leu Gly Pro Gly Lys Pro Gly Met Lys Ile Thr Arg Gln
          20          25          30
Lys His Ala Lys Lys His Leu Gly Phe Phe Arg Asn Asn Phe Gly Val
          35          40          45
Arg Glu Pro Tyr Gln Ile Leu Leu Asp Gly Thr Phe Cys Gln Ala Ala
          50          55          60
Leu Arg Gly Arg Ile Gln Leu Arg Glu Gln Leu Pro Arg Tyr Leu Met

```

```

65          70          75          80
Gly Glu Thr Gln Leu Cys Thr Thr Arg Cys Val Leu Lys Glu Leu Glu
      85          90          95
Thr Leu Gly Lys Asp Leu Tyr Gly Ala Lys Leu Ile Ala Gln Lys Cys
      100          105          110
Gln Val Arg Asn Cys Pro His Phe Lys Asn Ala Val Ser Gly Ser Glu
      115          120          125
Cys Leu Leu Ser Met Val Glu Glu Gly Asn Pro His His Tyr Phe Val
      130          135          140
Ala Thr Gln Asp Gln Asn Leu Ser Val Lys Val Lys Lys Lys Pro Gly
145          150          155          160
Val Pro Leu Met Phe Ile Ile Gln Asn Thr Met Val Leu Asp Lys Pro
      165          170          175
Ser Pro Lys Thr Ile Ala Phe Val Lys Ala Val Glu Ser Gly Arg Leu
      180          185          190
Ser Gln Cys Met Arg Lys Lys Val Ser Asn Ile Ser Lys Arg Asn Arg
      195          200          205
Val Xaa Xaa Lys Thr Leu Asn Arg Gly Arg Arg Lys Lys Arg Lys Lys
210          215          220
Ile Ser Gly Pro Asn Pro Leu Ser Cys Leu Lys Lys Lys Lys Ala
225          230          235          240
Pro Asp Thr Gln Ser Ser Ala Ser Glu Lys Lys Arg Lys Arg Lys Arg
      245          250          255
Ile Arg Asn Arg Ser Asn Pro Lys Val Leu Ser Glu Lys Gln Asn Ala
      260          265          270
Glu Gly Glu
      275

```

<210> 3367

<211> 476

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(474)

<223> Xaa = any amino acid or nothing

<400> 3367

```

Met Leu Trp Gly Cys Arg Ala Lys Ala Cys Trp Gly Pro Arg Leu Ser
 1          5          10          15
Asp Leu Val Ala Ser Leu Ser Pro Gln Arg Glu Cys Ile Ser Val His
      20          25          30
Val Gly Gln Ala Gly Val Gln Ile Gly Asn Ala Cys Trp Glu Leu Phe
      35          40          45
Cys Leu Glu His Gly Ile Gln Ala Asp Gly Thr Phe Asp Ala Gln Ala
      50          55          60
Ser Lys Ile Asn Asp Asp Asp Ser Phe Thr Thr Phe Phe Ser Glu Thr
      65          70          75          80
Gly Asn Gly Lys His Val Pro Arg Ala Val Met Ile Asp Leu Glu Pro
      85          90          95
Thr Val Val Asp Glu Val Arg Ala Gly Thr Tyr Arg Gln Leu Phe His
      100          105          110
Pro Glu Gln Leu Ile Thr Gly Lys Glu Asp Ala Ala Asn Asn Tyr Ala
      115          120          125
Arg Gly His Tyr Thr Val Gly Lys Glu Ser Ile Asp Leu Val Leu Asp
      130          135          140
Arg Ile Arg Lys Leu Thr Asp Ala Cys Ser Gly Leu Gln Gly Phe Leu
145          150          155          160
Ile Phe His Ser Phe Gly Gly Gly Thr Gly Ser Gly Phe Thr Ser Leu
      165          170          175
Leu Met Glu Arg Leu Ser Leu Asp Tyr Gly Lys Lys Ser Lys Leu Glu

```



```
<210> 3368
<211> 867
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(863)
<223> Xaa = any amino acid or nothing
```

5042

			100							105							110		
Gln	Ile	Pro	Glu	Glu	Thr	Gly	Leu	Pro	Gln	Gly	Arg	Asp	Thr	Thr	Gln				
		115					120					125							
Leu	Leu	Ala	Ser	Glu	Met	Val	His	Leu	Met	Met	Lys	Leu	Lys	Glu	Lys				
		130				135					140								
Arg	Arg	Ala	Ile	Xaa	Ala	Gln	Lys	Lys	Lys	Met	Glu	Ala	Ala	Phe	Thr				
145					150					155					160				
Lys	Gln	Arg	Gln	Lys	Met	Gly	Arg	Thr	Ala	Phe	Leu	Thr	Val	Val	Lys				
				165					170						175				
Lys	Lys	Gly	Asp	Gly	Ile	Ser	Pro	Leu	Arg	Glu	Glu	Ala	Ala	Gly	Ala				
			180					185					190						
Glu	Asp	Glu	Lys	Val	Tyr	Thr	Asp	Arg	Ala	Lys	Glu	Lys	Glu	Ser	Gln				
		195					200					205							
Lys	Thr	Asp	Gly	Gln	Arg	Ser	Lys	Ser	Leu	Ala	Asp	Ile	Lys	Glu	Ser				
		210				215					220								
Met	Glu	Asn	Pro	Gln	Ala	Lys	Trp	Leu	Lys	Ser	Pro	Thr	Thr	Pro	Ile				
225					230					235					240				
Asp	Pro	Glu	Lys	Gln	Gly	Asn	Leu	Ala	Ser	Pro	Ser	Glu	Glu	Thr	Leu				
				245				250						255					
Asn	Glu	Gly	Glu	Ile	Leu	Glu	Tyr	Thr	Lys	Ser	Ile	Glu	Lys	Leu	Asn				
			260				265					270							
Ser	Ser	Leu	His	Phe	Leu	Gln	Gln	Glu	Met	Gln	Arg	Leu	Ser	Leu	Gln				
		275					280					285							
Gln	Glu	Met	Leu	Met	Gln	Met	Arg	Glu	Gln	Gln	Ser	Trp	Val	Ile	Ser				
		290				295				300									
Pro	Pro	Gln	Pro	Ser	Pro	Gln	Lys	Gln	Ile	Arg	Asp	Phe	Lys	Pro	Ser				
305				310						315					320				
Lys	Gln	Ala	Gly	Leu	Ser	Ser	Ala	Ile	Ala	Pro	Phe	Ser	Ser	Asp	Ser				
				325				330						335					
Pro	Arg	Pro	Thr	His	Pro	Ser	Ser	Thr	Ser	Leu	Leu	Asn	Arg	Lys	Ser				
			340					345					350						
Ala	Ser	Phe	Ser	Val	Lys	Ser	Gln	Arg	Thr	Pro	Arg	Pro	Asn	Glu	Leu				
		355					360					365							
Lys	Ile	Thr	Pro	Leu	Asn	Arg	Thr	Leu	Thr	Pro	Pro	Arg	Ser	Val	Asp				
		370				375				380									
Ser	Leu	Pro	Arg	Leu	Arg	Arg	Phe	Ser	Pro	Ser	Gln	Val	Pro	Ile	Gln				
385				390						395					400				
Thr	Arg	Ser	Phe	Val	Cys	Phe	Gly	Asp	Asp	Gly	Glu	Pro	Gln	Leu	Lys				
			405					410						415					
Glu	Ser	Lys	Pro	Lys	Glu	Glu	Val	Lys	Lys	Glu	Glu	Leu	Glu	Ser	Lys				
			420					425					430						
Gly	Thr	Leu	Glu	Gln	Arg	Gly	His	Asn	Pro	Glu	Glu	Lys	Glu	Ile	Lys				
		435				440						445							
Pro	Phe	Glu	Ser	Thr	Val	Ser	Glu	Val	Leu	Ser	Leu	Pro	Val	Thr	Glu				
		450				455					460								
Thr	Val	Cys	Leu	Thr	Pro	Asn	Glu	Asp	Gln	Leu	Asn	Gln	Pro	Thr	Glu				
465				470						475					480				
Pro	Pro	Pro	Lys	Pro	Val	Phe	Pro	Pro	Thr	Ala	Pro	Lys	Asn	Val	Asn				
			485						490					495					
Leu	Ile	Glu	Val	Ser	Leu	Ser	Asp	Leu	Lys	Pro	Pro	Glu	Lys	Ala	Asp				
			500					505					510						
Val	Pro	Val	Glu	Lys	Tyr	Asp	Gly	Glu	Ser	Asp	Lys	Glu	Gln	Phe	Asp				
		515					520					525							
Asp	Asp	Gln	Lys	Val	Cys	Cys	Gly	Phe	Phe	Phe	Lys	Asp	Asp	Gln	Lys				
		530				535					540								
Ala	Glu	Asn	Asp	Met	Ala	Met	Lys	Arg	Ala	Ala	Leu	Leu	Glu	Lys	Arg				
545				550						555					560				
Leu	Arg	Arg	Glu	Lys	Glu	Thr	Gln	Leu	Arg	Lys	Gln	Gln	Leu	Glu	Ala				
			565						570					575					
Glu	Met	Glu	His	Lys	Lys	Glu	Glu	Thr	Arg	Arg	Lys	Thr	Glu	Glu	Glu				
			580					585					590						
Arg	Gln	Lys	Lys	Glu	Asp	Glu	Arg	Ala	Arg	Arg	Glu	Phe	Ile	Arg	Gln				
		595				600						605							
Glu	Tyr	Met	Arg	Arg	Lys	Gln	Leu	Lys	Leu	Met	Glu	Asp	Met	Asp	Thr				

610	615	620
Val Ile Lys Pro Arg Pro Gln Val Val Lys Gln Lys Lys Gln Arg Pro		
625	630	635
Lys Ser Ile His Arg Asp His Ile Glu Ser Pro Lys Thr Pro Ile Lys		640
	645	650
Gly Pro Pro Val Ser Ser Leu Ser Leu Ala Ser Leu Asn Thr Gly Asp		655
	660	665
Asn Glu Ser Val His Ser Gly Lys Arg Thr Pro Arg Ser Glu Ser Val		670
	675	680
Glu Gly Phe Leu Ser Pro Ser Arg Cys Gly Ser Arg Asn Gly Glu Lys		685
	690	695
Asp Trp Glu Asn Ala Ser Thr Thr Ser Ser Val Ala Ser Gly Thr Glu		700
705	710	715
Tyr Thr Gly Pro Lys Leu Tyr Lys Glu Pro Ser Ala Lys Ser Asn Lys		720
	725	730
His Ile Ile Gln Asn Ala Leu Ala His Cys Cys Leu Ala Gly Lys Val		735
	740	745
Asn Glu Gly Gln Lys Lys Lys Ile Leu Glu Glu Met Glu Lys Ser Asp		750
	755	760
Ala Asn Asn Phe Leu Ile Leu Phe Arg Asp Ser Gly Cys Gln Phe Arg		765
	770	775
Ser Leu Tyr Thr Tyr Cys Pro Glu Thr Glu Glu Ile Asn Lys Leu Thr		780
785	790	795
Gly Ile Gly Pro Lys Ser Ile Thr Lys Lys Met Ile Glu Gly Leu Tyr		800
	805	810
Lys Tyr Asn Ser Asp Arg Lys Gln Phe Ser His Ile Pro Ala Lys Thr		815
	820	825
Leu Ser Ala Ser Val Asp Ala Ile Thr Ile His Ser His Leu Trp Gln		830
	835	840
Thr Lys Arg Pro Val Thr Pro Lys Lys Leu Leu Pro Thr Lys Ala		845
850	855	860
		863

<210> 3369

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3369

Arg Gly Ser Gly Leu Thr Gln Glu Pro Gly Ser Val Gly Gln Leu Ala		
1	5	10
Leu Ala Cys Ala Glu Gly Ala Val Glu Trp Leu Tyr Pro Ala Gly Ala		15
	20	25
Leu Arg Leu Thr Leu Gly Gly Pro Asp Pro Arg Ala Arg Pro Gly Ile		30
	35	40
Ala Cys Leu Arg Pro Val Arg Pro Phe Ala Gly Ala Gln Val Phe Ala		45
	50	55
Glu Arg Ala Gly Gly Ala Leu Glu Leu Leu Leu Ala Glu Gly Pro Gly		60
	65	70
Pro Ala Gly Gly Arg Cys Val Arg Trp Gly Pro Arg Glu Arg Arg Ala		75
	80	85
Leu Phe Leu Gln Ala Thr Pro His Gln Asp Ile Ser Arg Arg Val Ala		90
	95	100
Ala Phe Arg Phe Glu Leu Arg Glu Asp Gly Arg Pro Glu Ile Ala Pro		105
	110	115
	120	125
		128

<210> 3370

<211> 285

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(284)

<223> Xaa = any amino acid or nothing

<400> 3370

```

Asp Leu Ser Leu Glu Cys Thr Gly Phe Lys Glu Thr Asn Leu Gly Val
 1           5           10           15
Tyr Phe Leu Ser Ser Lys Trp Val Leu Arg Leu Tyr Ala Leu His Ile
           20           25           30
Ile Asp Tyr Ser Ala Val Leu Phe Pro Cys Xaa Ala Met Asp His Leu
           35           40           45
Glu Ser Phe Ile Ala Glu Cys Asp Arg Arg Thr Glu Leu Ala Lys Lys
           50           55           60
Arg Leu Ala Glu Thr Gln Glu Glu Ile Ser Ala Glu Val Ser Ala Lys
           65           70           75           80
Ala Glu Lys Val His Glu Leu Asn Glu Glu Ile Gly Lys Leu Leu Ala
           85           90           95
Lys Ala Glu Gln Leu Gly Ala Glu Gly Asn Val Asp Glu Ser Gln Lys
           100          105          110
Ile Leu Met Glu Val Glu Lys Val Arg Ala Lys Lys Lys Glu Ala Glu
           115          120          125
Lys Thr Val Ala Glu Lys Gln Glu Lys Arg Asn Gln Asp Arg Leu Arg
           130          135          140
Arg Arg Glu Glu Arg Glu Arg Glu Arg Leu Ser Arg Arg Ser Gly
145          150          155          160
Ser Arg Thr Arg Asp Arg Arg Arg Ser Arg Ser Arg Asp Arg Arg Arg
           165          170          175
Arg Arg Ser Arg Ser Thr Ser Arg Glu Arg Arg Lys Leu Ser Arg Ser
           180          185          190
Arg Ser Arg Asp Arg His Arg Arg His Arg Ser Arg Ser Arg Ser His
           195          200          205
Ser Arg Gly His Arg Arg Ala Ser Arg Asp Arg Ser Ala Lys Tyr Lys
           210          215          220
Phe Ser Arg Glu Arg Ala Ser Arg Glu Glu Ser Trp Glu Ser Gly Arg
225          230          235          240
Ser Glu Arg Gly Pro Pro Asp Trp Arg Leu Glu Ser Ser Asn Gly Lys
           245          250          255
Met Ala Ser Arg Arg Ser Glu Glu Lys Glu Ala Gly Gly Asp Leu Leu
           260          265          270
Asn Arg Met Ile Val Trp Lys His Gly Leu Leu Ile
           275          280          284

```

<210> 3371

<211> 285

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(284)

<223> Xaa = any amino acid or nothing

<400> 3371

```

Asp Leu Ser Leu Glu Cys Thr Gly Phe Lys Glu Thr Asn Leu Gly Val
 1           5           10           15
Tyr Phe Leu Ser Ser Lys Trp Val Leu Arg Leu Tyr Ala Leu His Ile
           20           25           30
Ile Asp Tyr Ser Ala Val Leu Phe Pro Cys Xaa Ala Met Asp His Leu

```

```

      35      40      45
Glu Ser Phe Ile Ala Glu Cys Asp Arg Arg Thr Glu Leu Ala Lys Lys
  50      55      60
Arg Leu Ala Glu Thr Gln Glu Glu Ile Ser Ala Glu Val Ser Ala Lys
  65      70      75      80
Ala Glu Lys Val His Glu Leu Asn Glu Glu Ile Gly Lys Leu Leu Ala
      85      90      95
Lys Ala Glu Gln Leu Gly Ala Glu Gly Asn Val Asp Glu Ser Gln Lys
      100      105      110
Ile Leu Met Glu Val Glu Lys Val Arg Ala Lys Lys Lys Glu Ala Glu
      115      120      125
Lys Thr Val Ala Glu Lys Gln Glu Lys Arg Asn Gln Asp Arg Leu Arg
      130      135      140
Arg Arg Glu Glu Arg Glu Arg Glu Glu Arg Leu Ser Arg Arg Ser Gly
      145      150      155      160
Ser Arg Thr Arg Asp Arg Arg Arg Ser Arg Ser Arg Asp Arg Arg Arg
      165      170      175
Arg Arg Ser Arg Ser Thr Ser Arg Glu Arg Arg Lys Leu Ser Arg Ser
      180      185      190
Arg Ser Arg Asp Arg His Arg Arg His Arg Ser Arg Ser Arg Ser His
      195      200      205
Ser Arg Gly His Arg Arg Ala Ser Arg Asp Arg Ser Ala Lys Tyr Lys
      210      215      220
Phe Ser Arg Glu Arg Ala Ser Arg Glu Glu Ser Trp Glu Ser Gly Arg
      225      230      235      240
Ser Glu Arg Gly Pro Asp Trp Arg Leu Glu Ser Ser Asn Gly Lys
      245      250      255
Met Ala Ser Arg Arg Ser Glu Glu Lys Glu Ala Gly Gly Asp Leu Leu
      260      265      270
Asn Arg Met Ile Val Trp Lys His Gly Leu Leu Ile
      275      280      284

```

<210> 3372

<211> 1036

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(1035)

<223> Xaa = any amino acid or nothing

<400> 3372

```

Pro Met Gln Asn Cys Met Cys Ser Leu Thr Leu Ser Val Leu Pro Leu
  1      5      10      15
Gly Pro Gln Pro Pro Val Pro Glu Lys Arg Pro Pro Glu Ile Gln His
      20      25      30
Phe Arg Met Ser Asp Asp Val His Ser Leu Gly Lys Val Thr Ser Asp
      35      40      45
Leu Ala Lys Arg Arg Lys Leu Thr Ser Xaa Gly Gly Leu Ser Glu Glu
      50      55      60
Leu Gly Ser Ala Arg Arg Ser Gly Glu Val Thr Leu Thr Lys Gly Asp
      65      70      75      80
Pro Gly Ser Leu Glu Trp Glu Thr Val Val Gly Asp Asp Phe Ser
      85      90      95
Leu Tyr Tyr Asp Ser Tyr Ser Val Asp Glu Arg Val Asp Ser Asp Ser
      100      105      110
Lys Ser Glu Val Glu Ala Leu Thr Glu Gln Leu Ser Glu Glu Glu Glu
      115      120      125
Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu
      130      135      140
Glu Glu Glu Glu Asp Glu Glu Ser Gly Asn Gln Ser Asp Arg Ser Gly

```

145					150					155				160	
Ser	Ser	Gly	Arg	Arg	Lys	Ala	Lys	Lys	Lys	Trp	Arg	Lys	Asp	Ser	Pro
				165					170					175	
Trp	Val	Lys	Pro	Ser	Arg	Lys	Arg	Arg	Lys	Arg	Glu	Pro	Pro	Arg	Ala
			180					185					190		
Lys	Glu	Pro	Arg	Gly	Val	Asn	Gly	Val	Gly	Ser	Ser	Gly	Pro	Ser	Glu
		195					200					205			
Tyr	Met	Glu	Val	Pro	Leu	Gly	Ser	Leu	Glu	Leu	Pro	Ser	Glu	Gly	Thr
	210					215					220				
Leu	Ser	Pro	Asn	His	Ala	Gly	Val	Ser	Asn	Asp	Thr	Ser	Ser	Leu	Glu
225				230						235				240	
Thr	Glu	Arg	Gly	Phe	Glu	Glu	Leu	Pro	Leu	Cys	Ser	Cys	Arg	Met	Glu
			245						250					255	
Ala	Pro	Lys	Ile	Asp	Arg	Ile	Ser	Glu	Arg	Ala	Gly	His	Lys	Cys	Met
		260						265					270		
Ala	Thr	Glu	Ser	Val	Asp	Gly	Glu	Leu	Ser	Gly	Cys	Asn	Ala	Ala	Ile
	275						280					285			
Leu	Lys	Arg	Glu	Thr	Met	Arg	Pro	Ser	Ser	Arg	Val	Ala	Leu	Met	Val
	290					295					300				
Leu	Cys	Glu	Thr	His	Arg	Ala	Arg	Met	Val	Lys	His	His	Cys	Cys	Pro
305				310						315					320
Gly	Cys	Gly	Tyr	Phe	Cys	Thr	Ala	Gly	Thr	Phe	Leu	Glu	Cys	His	Pro
			325						330					335	
Asp	Phe	Arg	Val	Ala	His	Arg	Phe	His	Lys	Ala	Cys	Val	Ser	Gln	Leu
	340						345					350			
Asn	Gly	Met	Val	Phe	Cys	Pro	His	Cys	Gly	Glu	Asp	Ala	Ser	Glu	Ala
	355					360						365			
Gln	Glu	Val	Thr	Ile	Pro	Arg	Gly	Asp	Gly	Val	Thr	Pro	Pro	Ala	Gly
	370					375					380				
Thr	Ala	Ala	Pro	Ala	Pro	Pro	Pro	Leu	Ser	Gln	Asp	Val	Pro	Gly	Arg
385				390						395				400	
Ala	Asp	Thr	Ser	Gln	Pro	Ser	Ala	Arg	Met	Arg	Gly	His	Gly	Glu	Pro
			405						410					415	
Arg	Arg	Pro	Pro	Cys	Asp	Pro	Leu	Ala	Asp	Thr	Ile	Asp	Ser	Ser	Gly
		420						425					430		
Pro	Ser	Leu	Thr	Leu	Pro	Asn	Gly	Gly	Cys	Leu	Ser	Ala	Val	Gly	Leu
	435					440						445			
Pro	Leu	Gly	Pro	Gly	Arg	Glu	Ala	Leu	Glu	Lys	Ala	Leu	Val	Ile	Gln
	450					455					460				
Glu	Ser	Glu	Arg	Arg	Lys	Lys	Leu	Arg	Phe	His	Pro	Arg	Gln	Leu	Tyr
465				470						475				480	
Leu	Ser	Val	Lys	Gln	Gly	Glu	Leu	Gln	Lys	Val	Ile	Leu	Met	Leu	Leu
			485						490					495	
Asp	Asn	Leu	Asp	Pro	Asn	Phe	Gln	Ser	Asp	Gln	Gln	Ser	Lys	Arg	Thr
	500							505					510		
Pro	Leu	His	Ala	Ala	Ala	Gln	Lys	Gly	Ser	Val	Glu	Ile	Cys	His	Val
	515					520						525			
Leu	Leu	Gln	Ala	Gly	Ala	Asn	Ile	Asn	Ala	Val	Asp	Lys	Gln	Gln	Arg
	530					535					540				
Thr	Pro	Leu	Met	Glu	Ala	Val	Val	Asn	Asn	His	Leu	Glu	Val	Ala	Arg
545				550						555				560	
Tyr	Met	Val	Gln	Arg	Gly	Gly	Cys	Val	Tyr	Ser	Lys	Glu	Glu	Asp	Gly
			565						570					575	
Ser	Thr	Cys	Leu	His	His	Ala	Ala	Lys	Ile	Gly	Asn	Leu	Glu	Met	Val
	580							585					590		
Ser	Leu	Leu	Ser	Thr	Gly	Gln	Val	Asp	Val	Asn	Ala	Gln	Asp	Ser	
	595					600					605				
Gly	Gly	Trp	Thr	Pro	Ile	Ile	Trp	Ala	Ala	Glu	His	Lys	His	Ile	Glu
	610					615					620				
Val	Ile	Arg	Met	Leu	Leu	Thr	Arg	Gly	Ala	Asp	Val	Thr	Leu	Thr	Asp
625				630						635				640	
Asn	Glu	Glu	Asn	Ile	Cys	Leu	His	Trp	Ala	Ser	Phe	Thr	Gly	Ser	Ala
			645						650					655	
Ala	Ile	Ala	Glu	Val	Leu	Leu	Asn	Ala	Arg	Cys	Asp	Leu	His	Ala	Val

```

        660                665                670
Asn Tyr His Gly Asp Thr Pro Leu His Ile Ala Ala Arg Glu Ser Tyr
        675                680                685
His Asp Cys Val Leu Leu Phe Leu Ser Arg Gly Ala Asn Pro Glu Leu
        690                695                700
Arg Asn Lys Glu Gly Asp Thr Ala Trp Asp Leu Thr Pro Glu Arg Ser
705                710                715                720
Asp Val Trp Phe Ala Leu Gln Leu Asn Arg Lys Leu Arg Leu Gly Val
        725                730                735
Gly Asn Arg Ala Ile Arg Thr Glu Lys Ile Ile Cys Arg Asp Val Ala
        740                745                750
Arg Gly Tyr Glu Asn Val Pro Ile Pro Cys Val Asn Gly Val Asp Gly
        755                760                765
Glu Pro Cys Pro Glu Asp Tyr Lys Tyr Ile Ser Glu Asn Cys Glu Thr
        770                775                780
Ser Thr Met Asn Ile Asp Arg Asn Ile Thr His Leu Gln His Cys Thr
785                790                795                800
Cys Val Asp Asp Cys Ser Ser Ser Asn Cys Leu Cys Gly Gln Leu Ser
        805                810                815
Ile Arg Cys Trp Tyr Asp Lys Asp Gly Arg Leu Leu Gln Glu Phe Asn
        820                825                830
Lys Ile Glu Pro Pro Leu Ile Phe Glu Cys Asn Gln Ala Cys Ser Cys
        835                840                845
Trp Arg Asn Cys Lys Asn Arg Val Val Gln Ser Gly Ile Lys Val Arg
        850                855                860
Leu Gln Leu Tyr Arg Thr Ala Lys Met Gly Trp Gly Val Arg Ala Leu
865                870                875                880
Gln Thr Ile Pro Gln Gly Thr Phe Ile Cys Glu Tyr Val Gly Glu Leu
        885                890                895
Ile Ser Asp Ala Glu Ala Asp Val Arg Glu Asp Asp Ser Tyr Leu Phe
        900                905                910
Asp Leu Asp Asn Lys Asp Gly Glu Val Tyr Cys Ile Asp Ala Arg Tyr
        915                920                925
Tyr Gly Asn Ile Ser Arg Phe Ile Asn His Leu Cys Asp Pro Asn Ile
        930                935                940
Ile Pro Val Arg Val Phe Met Leu His Gln Asp Leu Arg Phe Pro Arg
945                950                955                960
Ile Ala Phe Phe Ser Ser Arg Asp Ile Arg Thr Gly Glu Glu Leu Gly
        965                970                975
Phe Asp Tyr Gly Asp Arg Phe Trp Asp Ile Lys Ser Lys Tyr Phe Thr
        980                985                990
Cys Gln Cys Gly Ser Glu Lys Cys Lys His Ser Ala Glu Ala Ile Ala
        995                1000                1005
Leu Glu Gln Ser Arg Leu Ala Arg Leu Asp Pro His Pro Glu Leu Leu
1010                1015                1020
Pro Glu Leu Gly Ser Leu Pro Pro Val Asn Thr
1025                1030                1035

```

<210> 3373

<211> 334

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(333)

<223> Xaa = any amino acid or nothing

<400> 3373

```

Pro Asp Gly Arg Leu Ile Val Ser Cys Ser Glu Asp Lys Thr Ile Lys
  1                5                10                15
Ile Trp Asp Thr Thr Asn Lys Gln Cys Val Asn Asn Phe Ser Asp Ser

```

```

      20      25      30
Val Gly Phe Ala Asn Phe Val Asp Phe Asn Pro Ser Gly Thr Cys Ile
      35      40      45
Ala Ser Ala Gly Ser Asp Gln Thr Val Lys Val Trp Asp Val Arg Val
      50      55      60
Asn Lys Leu Leu Gln His Tyr Gln Val His Ser Gly Gly Val Asn Cys
      65      70      75      80
Ile Ser Phe His Pro Ser Gly Asn Tyr Leu Ile Thr Ala Ser Ser Asp
      85      90      95
Gly Thr Leu Lys Ile Leu Asp Leu Leu Lys Gly Arg Leu Ile Tyr Thr
      100      105      110
Leu Gln Gly His Thr Gly Pro Val Phe Thr Val Ser Phe Ser Lys Gly
      115      120      125
Gly Glu Leu Phe Ala Ser Gly Gly Ala Asp Thr Gln Val Leu Leu Trp
      130      135      140
Arg Thr Asn Phe Asp Glu Leu His Cys Lys Gly Leu Thr Lys Arg Asn
      145      150      155      160
Leu Lys Arg Leu His Phe Asp Ser Pro Pro His Leu Leu Asp Ile Tyr
      165      170      175
Pro Arg Thr Pro His Pro His Glu Glu Lys Val Glu Thr Val Glu Asp
      180      185      190
Phe Phe Leu His Leu Leu Arg Leu Ile Gln Ser Leu Arg Xaa Ser Ile
      195      200      205
Cys Arg Ser Leu Leu Pro Leu Leu Trp Ile Ser Phe Leu Leu Ile Leu
      210      215      220
Pro Gln Gln Gln Lys Pro Val Val Gly Leu Cys Gln Thr Arg Val Lys
      225      230      235      240
Arg Pro Val Asp Ile Ser Xaa Thr Leu Pro Xaa Cys His Gln Asn Val
      245      250      255
Cys Gln Gln Pro Arg Lys Arg Lys Gln Lys Thr Xaa Val Thr Ser Pro
      260      265      270
Val Lys Val Lys Val Ser Ile Pro Leu Ala Val Thr Asp Ala Leu Glu
      275      280      285
His Ile Met Glu Gln Leu Asn Val Leu Thr Gln Thr Val Ser Ile Leu
      290      295      300
Glu Gln Arg Leu Thr Leu Thr Glu Asp Lys Leu Lys Asp Cys Leu Glu
      305      310      315      320
Asn Gln Gln Lys Leu Phe Ser Ala Val Gln Gln Lys Ser
      325      330      333

```

<210> 3374

<211> 128

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(127)

<223> Xaa = any amino acid or nothing

<400> 3374

```

Trp Leu Tyr Pro Met Ala Leu Ser Ile Leu Asp Ile Lys Met Ser Pro
  1      5      10      15
Ser Trp Tyr Phe His Met Ala Ile Gly Ile Ile Asn Trp Asn Thr Thr
      20      25      30
Ala Gly Leu Ser Gly Thr Leu Tyr Pro Lys Val Pro Gln Lys Tyr Ile
      35      40      45
Leu Phe Asp Ser Val Ile Leu Leu Leu Gly Met Leu Arg Lys Ile Arg
      50      55      60
Gln Val Cys Gln Asn Val Tyr Met Lys Gly Cys Ser Pro Ile Thr Leu
      65      70      75      80
Phe Lys Ile Val His Tyr Trp Pro Gly Ala Val Ala His Ala Tyr Asn

```


				85					90					95			
Pro	Ser	Thr	Leu	Gly	Gly	Gln	Val	Gly	Trp	Gln	Ile	Thr	Xaa	Gly	Gln		
			100					105					110				
Glu	Phe	Glu	Thr	Ser	Leu	Asp	Tyr	Met	Val	Lys	Pro	His	Leu	Tyr			
			115				120					125		127			

<210> 3375

<211> 351

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(349)

<223> Xaa = any amino acid or nothing

<400> 3375

Val	Pro	Thr	Gln	Gln	Ile	Leu	Ala	Phe	Pro	Glu	Gln	Thr	Asn	Thr	Lys		
1				5					10						15		
Asp	Trp	Thr	Val	Thr	Pro	Glu	His	Val	Leu	Pro	Glu	Ser	Gln	Ser	Leu		
			20					25					30				
Leu	Thr	Phe	Glu	Glu	Val	Ala	Met	Tyr	Phe	Ser	Gln	Glu	Glu	Trp	Glu		
		35				40						45					
Leu	Leu	Asp	Pro	Thr	Gln	Lys	Ala	Leu	Tyr	Asn	Asp	Val	Met	Gln	Glu		
	50					55					60						
Asn	Tyr	Glu	Thr	Val	Ile	Ser	Leu	Ala	Leu	Phe	Val	Leu	Pro	Lys	Pro		
	65				70					75					80		
Lys	Val	Ile	Ser	Cys	Leu	Glu	Gln	Gly	Glu	Glu	Pro	Trp	Val	Gln	Val		
			85						90					95			
Ser	Pro	Glu	Phe	Lys	Asp	Ser	Ala	Gly	Lys	Ser	Pro	Thr	Gly	Leu	Lys		
			100					105					110				
Leu	Lys	Asn	Asp	Thr	Glu	Asn	His	Gln	Pro	Val	Ser	Leu	Ser	Asp	Leu		
		115					120					125					
Glu	Ile	Gln	Ala	Ser	Ala	Gly	Val	Ile	Ser	Lys	Lys	Ala	Lys	Val	Lys		
	130					135					140						
Val	Pro	Gln	Lys	Thr	Ala	Gly	Lys	Glu	Asn	His	Phe	Asp	Met	His	Arg		
	145				150					155				160			
Val	Gly	Lys	Trp	His	Gln	Asp	Phe	Pro	Val	Lys	Lys	Arg	Lys	Lys	Leu		
			165					170						175			
Ser	Thr	Trp	Lys	Gln	Glu	Leu	Leu	Lys	Leu	Met	Asp	Arg	His	Lys	Lys		
			180					185				190					
Asp	Cys	Ala	Arg	Glu	Lys	Pro	Phe	Lys	Cys	Gln	Glu	Cys	Gly	Lys	Thr		
		195				200					205						
Phe	Arg	Val	Ser	Ser	Asp	Leu	Ile	Lys	His	Gln	Arg	Ile	His	Thr	Glu		
	210				215					220							
Glu	Lys	Pro	Tyr	Lys	Cys	Gln	Gln	Cys	Asp	Lys	Arg	Phe	Arg	Trp	Ser		
	225				230					235				240			
Ser	Asp	Leu	Asn	Lys	His	Leu	Thr	Thr	His	Gln	Gly	Ile	Lys	Pro	Tyr		
			245					250					255				
Lys	Cys	Ser	Trp	Gly	Gly	Lys	Ser	Phe	Ser	Gln	Asn	Thr	Asn	Leu	His		
		260						265				270					
Thr	His	Gln	Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Phe	Thr	Cys	His	Glu		
	275					280						285					
Cys	Gly	Lys	Lys	Phe	Ser	Gln	Asn	Ser	His	Leu	Ile	Lys	His	Arg	Arg		
	290					295					300						
Thr	His	Thr	Gly	Glu	Gln	Pro	Tyr	Thr	Cys	Ser	Ile	Cys	Arg	Arg	Asn		
	305				310					315				320			
Phe	Ser	Arg	Arg	Ser	Ser	Leu	Leu	Arg	His	Gln	Lys	Leu	His	Leu	Xaa		
			325					330					335				
Arg	Glu	Ala	Cys	Pro	Val	Ser	His	Phe	Trp	Lys	Thr	Phe					
		340						345				349					

<210> 3376
 <211> 732
 <212> PRT
 <213> Homo sapiens

 <221> misc_feature
 <222> (1)...(730)
 <223> Xaa = any amino acid or nothing

<400> 3376
 Ser Phe Glu Ser Pro Ala Pro Leu Pro Ser Thr Cys Phe Pro Gln Glu
 1 5 10 15
 Arg Gln Asp Pro Gly Pro Cys Tyr Val Ser Gly Ala Met Ala Gly Leu
 20 25 30
 Gly Pro Gly Val Gly Asp Ser Glu Gly Gly Pro Arg Pro Leu Phe Cys
 35 40 45
 Arg Lys Gly Ala Leu Arg Gln Lys Val Val His Glu Val Lys Ser His
 50 55 60
 Lys Phe Thr Ala Arg Phe Phe Lys Gln Pro Thr Phe Cys Ser His Cys
 65 70 75 80
 Thr Asp Phe Ile Trp Gly Ile Gly Lys Gln Gly Leu Gln Cys Gln Val
 85 90 95
 Cys Ser Phe Val Val His Arg Arg Cys His Glu Phe Val Thr Phe Glu
 100 105 110
 Cys Pro Gly Ala Gly Lys Gly Pro Gln Thr Asp Asp Pro Arg Asn Lys
 115 120 125
 His Lys Phe Arg Leu His Ser Tyr Ser Ser Pro Thr Phe Cys Asp His
 130 135 140
 Cys Gly Ser Leu Leu Tyr Gly Leu Val His Gln Gly Met Lys Cys Ser
 145 150 155 160
 Cys Cys Glu Met Asn Val His Arg Arg Cys Val Arg Ser Val Pro Ser
 165 170 175
 Leu Cys Gly Val Asp His Thr Glu Arg Arg Gly Arg Leu Gln Leu Glu
 180 185 190
 Ile Arg Ala Pro Thr Ala Asp Glu Ile His Val Thr Val Gly Glu Ala
 195 200 205
 Arg Asn Leu Ile Pro Met Asp Pro Asn Gly Leu Ser Asp Pro Tyr Val
 210 215 220
 Lys Leu Lys Leu Ile Pro Asp Pro Arg Asn Leu Thr Lys Gln Lys Thr
 225 230 235 240
 Arg Thr Val Lys Ala Thr Leu Asn Pro Val Trp Asn Glu Thr Phe Val
 245 250 255
 Phe Asn Leu Lys Pro Gly Asp Val Glu Arg Arg Leu Ser Val Glu Val
 260 265 270
 Trp Asp Trp Asp Arg Thr Ser Arg Asn Asp Phe Met Gly Ala Met Ser
 275 280 285
 Phe Gly Val Ser Glu Leu Leu Lys Ala Pro Val Asp Gly Trp Tyr Lys
 290 295 300
 Leu Leu Asn Gln Glu Glu Gly Glu Tyr Tyr Asn Val Pro Val Ala Asp
 305 310 315 320
 Ala Asp Asn Cys Ser Leu Leu Gln Lys Phe Glu Ala Cys Asn Tyr Pro
 325 330 335
 Leu Glu Leu Tyr Glu Arg Val Arg Met Gly Pro Ser Ser Ser Pro Ile
 340 345 350
 Pro Ser Pro Ser Pro Ser Pro Thr Asp Pro Lys Arg Cys Phe Phe Gly
 355 360 365
 Ala Ser Pro Gly Arg Leu His Ile Ser Asp Phe Ser Phe Leu Met Val
 370 375 380
 Leu Gly Lys Gly Ser Phe Gly Lys Val Met Leu Ala Glu Arg Arg Gly
 385 390 395 400
 Ser Asp Glu Leu Tyr Ala Ile Lys Ile Leu Lys Lys Asp Val Ile Val

```

      405      410      415
Gln Asp Asp Asp Val Asp Cys Thr Leu Val Glu Lys Arg Val Leu Ala
      420      425      430
Leu Gly Gly Arg Gly Pro Gly Gly Arg Pro His Phe Leu Thr Gln Leu
      435      440      445
His Ser Thr Phe Gln Thr Pro Asp Arg Leu Tyr Phe Val Met Glu Tyr
      450      455      460
Val Thr Gly Gly Asp Leu Met Tyr His Ile Gln Gln Leu Gly Lys Phe
      465      470      475      480
Lys Glu Pro His Ala Ala Phe Tyr Ala Ala Glu Ile Ala Ile Gly Leu
      485      490      495
Phe Phe Leu His Asn Gln Gly Ile Ile Tyr Arg Asp Leu Lys Leu Asp
      500      505      510
Asn Val Met Leu Asp Ala Glu Gly His Ile Lys Ile Thr Asp Phe Gly
      515      520      525
Met Cys Lys Glu Asn Val Phe Pro Gly Thr Thr Thr Arg Thr Phe Cys
      530      535      540
Gly Thr Pro Asp Tyr Ile Ala Pro Glu Ile Ile Ala Tyr Gln Pro Tyr
      545      550      555      560
Gly Lys Ser Val Asp Trp Trp Ser Phe Gly Val Leu Leu Tyr Glu Met
      565      570      575
Leu Ala Gly Gln Pro Pro Phe Asp Gly Glu Asp Glu Glu Glu Leu Phe
      580      585      590
Gln Ala Ile Met Glu Gln Thr Val Thr Tyr Pro Lys Ser Leu Ser Arg
      595      600      605
Glu Ala Val Ala Ile Cys Lys Gly Phe Leu Thr Lys His Pro Gly Glu
      610      615      620
Ala Pro Gly Ala Ser Gly Pro Xaa Trp Gly Asn Leu Thr Ile Arg Ala
      625      630      635      640
His Gly Phe Phe Pro Leu Gly Phe Asp Trp Glu Arg Leu Glu Arg Leu
      645      650      655
Glu Ile Pro Ala Ser Phe Ser Arg Pro Arg Pro Cys Gly Pro Gln Arg
      660      665      670
Arg Gly Ile Phe Asp Lys Phe Phe Thr Arg Ala Ala Pro Ala Leu Thr
      675      680      685
Pro Pro Ala Arg Leu Val Leu Asp Ser Ile Asp Gln Ala Asp Phe Gln
      690      695      700
Gly Phe Thr Tyr Val Asn Pro Asp Phe Val Gln Pro Asp Ala Arg Ser
      705      710      715      720
Pro Thr Ser Thr Val His Val Pro Val Met
      725      730

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<210> 3377
 <211> 59
 <212> PRT
 <213> Homo sapiens

```

      <400> 3377
Ser Ser Met Leu Trp Gly Phe Ser Val Phe Arg Arg Ser Trp Ile Leu
  1      5      10      15
Asn Cys Trp Leu Ser Ser Ser Gln Val Gly Ile Ser Ala Ala Cys Lys
      20      25      30
Phe Ser Thr Leu Thr His Thr His Thr His Thr His Thr Arg
      35      40      45
His Ala Pro Phe Cys Gly Thr Cys Leu Tyr Tyr
      50      55      59

```

<210> 3378
 <211> 225

<212> PRT
 <213> Homo sapiens
 <221> misc_feature
 <222> (1)...(224)
 <223> Xaa = any amino acid or nothing

<400> 3378
 Phe Ser Lys Leu Ile Met Lys Thr Phe Ile Ile Gly Ile Ser Gly Val
 1 5 10 15
 Thr Asn Ser Gly Lys Thr Thr Leu Ala Lys Asn Leu Gln Lys His Leu
 20 25 30
 Pro Asn Cys Ser Val Ile Ser Gln Asp Asp Phe Phe Lys Pro Glu Ser
 35 40 45
 Glu Ile Glu Thr Asp Lys Asn Gly Phe Leu Gln Tyr Asp Val Leu Glu
 50 55 60
 Ala Leu Asn Met Glu Lys Met Met Ser Ala Ile Ser Cys Trp Met Glu
 65 70 75 80
 Ser Ala Arg His Ser Val Val Ser Thr Asp Gln Glu Ser Ala Glu Glu
 85 90 95
 Ile Pro Ile Leu Ile Ile Glu Gly Phe Leu Leu Phe Asn Tyr Lys Pro
 100 105 110
 Leu Asp Thr Ile Trp Asn Arg Ser Tyr Phe Leu Thr Ile Pro Tyr Glu
 115 120 125
 Glu Cys Lys Arg Arg Arg Ser Thr Arg Val Tyr Gln Pro Pro Asp Ser
 130 135 140
 Pro Gly Tyr Phe Asp Gly His Val Trp Pro Met Tyr Leu Lys Tyr Arg
 145 150 155 160
 Gln Glu Met Gln Asp Ile Thr Trp Glu Val Val Tyr Leu Asp Gly Thr
 165 170 175
 Lys Ser Glu Glu Asp Leu Phe Leu Gln Val Tyr Glu Asp Leu Ile Gln
 180 185 190
 Glu Leu Ala Lys Gln Lys Cys Leu Gln Val Thr Ala Xaa Arg Arg Asn
 195 200 205
 Thr Thr Asn Pro Ser Cys Lys Xaa Ile Arg Lys Leu Gln Gly Val Ile
 210 215 220 224

<210> 3379
 <211> 225
 <212> PRT
 <213> Homo sapiens
 <221> misc_feature
 <222> (1)...(224)
 <223> Xaa = any amino acid or nothing

<400> 3379
 Phe Ser Lys Leu Ile Met Lys Thr Phe Ile Ile Gly Ile Ser Gly Val
 1 5 10 15
 Thr Asn Ser Gly Lys Thr Thr Leu Ala Lys Asn Leu Gln Lys His Leu
 20 25 30
 Pro Asn Cys Ser Val Ile Ser Gln Asp Asp Phe Phe Lys Pro Glu Ser
 35 40 45
 Glu Ile Glu Thr Asp Lys Asn Gly Phe Leu Gln Tyr Asp Val Leu Glu
 50 55 60
 Ala Leu Asn Met Glu Lys Met Met Ser Ala Ile Ser Cys Trp Met Glu
 65 70 75 80
 Ser Ala Arg His Ser Val Val Ser Thr Asp Gln Glu Ser Ala Glu Glu

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<210> 3380
<211> 216
<212> PRT
<213> Homo sapiens
```

```
<210> 3381
<211> 158
<212> PRT
<213> Homo sapiens
```

<221> misc_feature
 <222> (1)...(157)
 <223> Xaa = any amino acid or nothing

<400> 3381
 Ser Leu Lys Leu Arg Lys Pro Pro Leu Pro Thr Asp Gly Val His Phe
 1 5 10 15
 Val Phe Val Glu Ser Gln Leu Asp Phe Trp Gly Pro Gln Glu Met Leu
 20 25 30
 Thr Gln Gln Gly Met Ala Leu Gln Asn Tyr Asp Asn Lys Leu Val Lys
 35 40 45
 Cys Ile Glu Glu Leu Cys Gln Lys Gln Glu Glu Leu Cys Trp Gln Ile
 50 55 60
 Gln Gln Glu Glu Asp Lys Lys Gln Arg Leu Gln Asn Glu Val Arg Gln
 65 70 75 80
 Leu Thr Glu Lys Leu Ala Cys Val Asn Glu Lys Leu Ala Arg Val Asn
 85 90 95
 Glu Asn Leu Ala Arg Lys Ile Ala Ser Cys Ser Lys Phe Tyr Gln Thr
 100 105 110
 Ile Ala Glu Thr Glu Ala Thr Tyr Leu Lys Ile Leu Glu Ser Phe Xaa
 115 120 125
 Thr Leu Leu Ser Val Arg Lys Arg Glu Ala Gly Asn Leu Thr Lys Ala
 130 135 140
 Thr Ala Pro Asp Gln Lys Ser Ser Gly Gly Arg Asp Ser
 145 150 155 157

<210> 3382
 <211> 488
 <212> PRT
 <213> Homo sapiens

<221> misc_feature
 <222> (1)...(486)
 <223> Xaa = any amino acid or nothing

<400> 3382
 Gly Ile Arg Gly Lys Met Ala Asp Arg Gly Gly Val Gly Glu Ala Ala
 1 5 10 15
 Ala Val Gly Ala Ser Pro Ala Ser Val Pro Gly Leu Asn Pro Thr Leu
 20 25 30
 Gly Trp Arg Glu Arg Leu Arg Ala Gly Leu Ala Gly Thr Gly Ala Ser
 35 40 45
 Leu Trp Phe Val Ala Gly Leu Gly Leu Leu Tyr Ala Leu Arg Ile Pro
 50 55 60
 Leu Arg Leu Cys Glu Asn Leu Ala Ala Val Thr Val Phe Leu Asn Ser
 65 70 75 80
 Leu Thr Pro Lys Phe Tyr Val Ala Leu Thr Gly Thr Ser Ser Leu Ile
 85 90 95
 Ser Gly Leu Ile Phe Ile Phe Glu Trp Trp Tyr Phe His Lys His Gly
 100 105 110
 Thr Ser Phe Ile Glu Gln Val Ser Val Ser His Leu Gln Pro Leu Met
 115 120 125
 Gly Gly Thr Glu Ser Ser Ile Ser Glu Pro Gly Ser Pro Ser Arg Asn
 130 135 140
 Arg Glu Asn Glu Thr Ser Arg Gln Asn Leu Ser Glu Cys Lys Val Trp
 145 150 155 160
 Arg Asn Pro Leu Asn Leu Phe Arg Gly Ala Glu Tyr Arg Arg Tyr Thr
 165 170 175
 Trp Val Thr Gly Lys Glu Pro Leu Thr Tyr Tyr Asp Met Asn Leu Ser

```
<210> 3383
<211> 729
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(715)
<223> Xaa = any amino acid or nothing
```

<400> 3383															
Arg	Gly	Lys	Gly	Phe	Lys	Glu	Phe	Phe	Leu	Gly	Val	Cys	Gln	Thr	Phe
1				5					10					15	
Ile	Pro	Cys	Leu	Cys	Ala	Glu	Gly	Ile	Gln	Leu	Gln	Phe	Phe	Cys	Ser
			20					25					30		
Gly	Ser	Gly	Ser	Ser	Pro	Leu	Leu	Lys	Asp	Leu	Glu	Ser	Met	Lys	Thr
		35					40					45			
Gly	Leu	Phe	Phe	Leu	Cys	Leu	Leu	Gly	Thr	Ala	Ala	Ala	Ile	Pro	Thr
	50					55				60					
Asn	Ala	Arg	Leu	Leu	Ser	Asp	His	Ser	Lys	Pro	Thr	Ala	Glu	Thr	Val
65					70					75				80	
Ala	Pro	Asp	Asn	Thr	Ala	Ile	Pro	Ser	Leu	Arg	Ala	Glu	Ala	Glu	Glu

5057


```
<210> 3384
<211> 751
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(743)
<223> Xaa = any amino acid or nothing
```

5058

275	280	285
Phe Pro Ala Leu Leu Val	Glu Lys Leu Leu Gln Glu His Leu Glu Glu	
290	295	300
Gln Glu Val Ala Pro Pro Ala Leu Pro Pro Lys Pro Pro Lys Ala Lys		
305	310	315
Pro Ala Ser Thr Val Pro Gly Pro Asn Gly Gly Ser Pro Pro Ser Leu		
325	330	335
Gln Asp Ala Glu Trp Tyr Trp Gly Asp Ile Ser Arg Glu Glu Val Asn		
340	345	350
Glu Lys Leu Arg Asp Thr Pro Asp Gly Thr Phe Leu Val Arg Asp Ala		
355	360	365
Ser Ser Lys Ile Gln Gly Glu Tyr Thr Leu Thr Leu Arg Lys Gly Gly		
370	375	380
Asn Asn Lys Leu Ile Lys Val Phe His Arg Asp Gly His Tyr Gly Phe		
385	390	395
Ser Glu Pro Leu Thr Phe Cys Ser Val Val Asp Leu Ile Asn His Tyr		
405	410	415
Arg His Glu Ser Leu Ala Gln Tyr Asn Ala Lys Leu Asp Thr Arg Leu		
420	425	430
Leu Tyr Pro Val Ser Lys Tyr Gln Gln Asp Gln Ile Val Lys Glu Asp		
435	440	445
Ser Val Glu Ala Val Gly Ala Gln Leu Lys Val Tyr His Gln Gln Tyr		
450	455	460
Gln Asp Lys Ser Arg Glu Tyr Asp Gln Leu Tyr Glu Glu Tyr Thr Arg		
465	470	475
Thr Ser Gln Glu Leu Gln Met Lys Arg Thr Ala Ile Glu Ala Phe Asn		
485	490	495
Glu Thr Ile Lys Ile Phe Glu Glu Gln Gly Gln Thr Gln Glu Lys Cys		
500	505	510
Ser Lys Glu Tyr Leu Glu Arg Phe Arg Arg Glu Gly Asn Gln Thr Lys		
515	520	525
Glu Met Gln Arg Ile Leu Leu Asn Ser Glu Arg Leu Lys Ser Arg Ile		
530	535	540
Ala Glu Ile His Glu Ser Arg Thr Lys Leu Glu Gln Gln Leu Leu Val		
545	550	555
Pro Arg Ala Ser Asp Asn Lys Arg Asp Ile Asp Lys Pro His Xaa Thr		
565	570	575
Ser Leu Lys Pro Asp Leu Met Gln Leu Arg Lys Ile Arg Asp Gln Tyr		
580	585	590
Leu Val Trp Leu Thr Gln Lys Gly Ala Arg Gln Lys Lys Ile Asn Glu		
595	600	605
Trp Leu Gly Ile Lys Asn Glu Thr Glu Asp Gln Tyr Ala Leu Met Glu		
610	615	620
Asp Glu Asp Asp Leu Pro His His Glu Glu Arg Thr Trp Tyr Val Gly		
625	630	635
Lys Ile Asn Arg Thr Gln Ala Glu Glu Met Leu Ser Gly Lys Arg Asp		
645	650	655
Gly Thr Phe Leu Ile Arg Glu Ser Ser Gln Arg Gly Cys Tyr Ala Cys		
660	665	670
Ser Val Val Val Asp Gly Asp Thr Lys His Cys Val Ile Tyr Arg Thr		
675	680	685
Ala Thr Gly Phe Gly Phe Ala Glu Pro Tyr Asn Leu Tyr Gly Ser Leu		
690	695	700
Lys Glu Leu Val Leu His Tyr Gln His Ala Ser Leu Val Gln His Asn		
705	710	715
Asp Ala Leu Thr Val Thr Leu Ala His Pro Val Arg Ala Pro Gly Pro		
725	730	735
Gly Pro Pro Pro Ala Ala Arg		
740	743	

<210> 3385

<211> 1253

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(1252)

<223> Xaa = any amino acid or nothing

<400> 3385

```

Thr Arg Asp Val Asn Ser Trp Lys Glu Leu Cys Phe Asn His Tyr Asn
 1          5          10          15
Lys Glu Thr Thr Asn Cys Tyr Arg Thr Arg Lys Trp Thr Asn Tyr
          20          25          30
Lys Ile Ile Phe Leu Gly Pro Phe Arg Glu Leu Arg Ser Gln Gly Asn
          35          40          45
Gln Val Ile Leu Asn Leu Gly Lys Glu Arg Cys Gln Leu Arg Glu Thr
          50          55          60
Gly Leu Lys Leu Tyr Leu Pro Gly Met Asp Ser Ala Arg His His Ile
65          70          75          80
Ser His Ser Thr Ser Ala Gly Pro Ile Pro Ser Gln Lys Glu Glu Glu
          85          90          95
Met Thr Glu Ser Gln Gly Thr Val Thr Phe Lys Asp Val Ala Ile Asp
          100          105          110
Phe Thr Gln Glu Glu Trp Lys Arg Leu Asp Pro Ala Gln Arg Lys Leu
          115          120          125
Tyr Arg Asn Val Met Leu Xaa Asn Tyr Asn Asn Leu Ile Thr Val Gly
130          135          140
Tyr Pro Phe Thr Lys Pro Asp Val Ile Phe Lys Leu Glu Gln Glu Glu
145          150          155          160
Lys Pro Trp Val Met Glu Glu Glu Val Leu Arg Arg His Trp Gln Gly
          165          170          175
Glu Ile Trp Gly Val Asp Glu His Gln Lys Asn Gln Asp Arg Leu Leu
          180          185          190
Arg Gln Val Glu Val Lys Phe Gln Lys Thr Leu Thr Glu Glu Lys Gly
          195          200          205
Asn Glu Cys Gln Lys Lys Phe Ala Asn Val Phe Pro Leu Asn Ser Asp
210          215          220
Phe Phe Pro Ser Arg His Asn Leu Tyr Glu Tyr Asp Leu Phe Gly Lys
225          230          235          240
Cys Leu Glu His Asn Phe Asp Cys His Asn Asn Val Lys Cys Leu Met
          245          250          255
Arg Lys Glu His Cys Glu Tyr Asn Glu Pro Val Lys Ser Tyr Gly Asn
          260          265          270
Ser Ser Ser His Phe Val Ile Thr Pro Phe Lys Cys Asn His Cys Gly
275          280          285
Lys Gly Phe Asn Gln Thr Leu Asp Leu Ile Arg His Leu Arg Ile His
290          295          300
Thr Gly Glu Lys Pro Tyr Glu Cys Ser Asn Cys Arg Lys Ala Phe Ser
305          310          315          320
His Lys Glu Lys Leu Ile Lys His Tyr Lys Ile His Ser Arg Glu Gln
          325          330          335
Ser Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Ile Lys Met Ser Asn
          340          345          350
Leu Ile Arg His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Ala Cys
355          360          365
Lys Glu Cys Glu Lys Ser Phe Ser Gln Lys Ser Asn Leu Ile Asp His
370          375          380
Glu Lys Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly
385          390          395          400
Lys Ala Phe Ser Gln Lys Gln Ser Leu Ile Ala His Gln Lys Val His
          405          410          415
Thr Gly Glu Lys Pro Tyr Ala Cys Asn Glu Cys Gly Lys Ala Phe Pro
          420          425          430
Arg Ile Ala Ser Leu Ala Leu His Met Arg Ser His Thr Gly Glu Lys

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435	440	445
Pro Tyr Lys Cys Asp Lys Cys Gly Lys Ala Phe Ser Gln Phe Ser Met		
450	455	460
Leu Ile Ile His Val Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys		
465	470	475
Asn Glu Cys Gly Lys Ala Phe Ser Gln Ser Ser Ala Leu Thr Val His		480
485	490	495
Met Arg Ser His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Arg		
500	505	510
Lys Ala Phe Ser His Lys Lys Asn Phe Ile Thr His Gln Lys Ile His		
515	520	525
Thr Arg Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala Phe Ile		
530	535	540
Gln Met Ser Asn Leu Val Arg His Gln Arg Ile His Thr Gly Glu Lys		
545	550	555
Pro Tyr Ile Cys Lys Glu Cys Gly Lys Ala Phe Ser Gln Lys Ser Asn		560
565	570	575
Leu Ile Ala His Glu Lys Ile His Ser Gly Glu Lys Pro Tyr Glu Cys		
580	585	590
Asn Glu Cys Gly Lys Ala Phe Ser Gln Lys Gln Asn Phe Ile Thr His		
595	600	605
Gln Lys Val His Thr Gly Glu Lys Pro Tyr Asp Cys Asn Glu Cys Gly		
610	615	620
Lys Ala Phe Ser Gln Ile Ala Ser Leu Thr Leu His Leu Arg Ser His		
625	630	635
Thr Gly Glu Lys Pro Tyr Glu Cys Asp Lys Cys Gly Lys Ala Phe Ser		640
645	650	655
Gln Cys Ser Leu Leu Asn Leu His Met Arg Ser His Thr Gly Glu Lys		
660	665	670
Pro Tyr Val Cys Asn Glu Cys Gly Lys Ala Phe Ser Gln Arg Thr Phe		
675	680	685
Leu Ile Val His Met Arg Gly His Thr Gly Glu Lys Pro Tyr Glu Cys		
690	695	700
Asn Glu Cys Gly Lys Ala Phe Ser Gln Ser Ser Ser Leu Thr Ile His		
705	710	715
Ile Arg Gly His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Arg		
725	730	735
Lys Ala Phe Ser His Lys Lys Asn Phe Ile Thr His Gln Lys Ile His		
740	745	750
Thr Arg Glu Lys Pro Phe Lys Cys Asn His Cys Gly Lys Gly Phe Asn		
755	760	765
Gln Thr Leu Asp Leu Ile Arg His Leu Arg Ile His Thr Gly Glu Lys		
770	775	780
Pro Tyr Glu Cys Ser Asn Cys Arg Lys Ala Phe Ser His Lys Glu Lys		
785	790	795
Leu Ile Lys His Tyr Lys Ile His Ser Arg Glu Gln Ser Tyr Lys Cys		800
805	810	815
Asn Glu Cys Gly Lys Ala Phe Ile Lys Met Ser Asn Leu Ile Arg His		
820	825	830
Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Ala Cys Lys Glu Cys Glu		
835	840	845
Lys Ser Phe Ser Gln Lys Ser Asn Leu Ile Asp His Glu Lys Ile His		
850	855	860
Thr Gly Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser		
865	870	875
Gln Lys Gln Ser Leu Ile Ala His Gln Lys Val His Thr Gly Glu Lys		
885	890	895
Pro Tyr Ala Cys Asn Glu Cys Gly Lys Ala Phe Pro Arg Ile Ala Ser		
900	905	910
Leu Ala Leu His Met Arg Ser His Thr Gly Glu Lys Pro Tyr Lys Cys		
915	920	925
Asp Lys Cys Gly Lys Ala Phe Ser Gln Phe Ser Met Leu Ile Ile His		
930	935	940
Val Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly		

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945          950          955          960
Lys Ala Phe Ser Gln Ser Ser Ala Leu Thr Val His Met Arg Ser His
          965          970          975
Thr Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Arg Lys Ala Phe Ser
          980          985          990
His Lys Lys Asn Phe Ile Thr His Gln Lys Ile His Thr Arg Glu Lys
          995          1000          1005
Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala Phe Ile Gln Met Ser Asn
          1010          1015          1020
Leu Val Arg His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Ile Cys
1025          1030          1035          1040
Lys Glu Cys Gly Lys Ala Phe Ser Gln Lys Ser Asn Leu Ile Ala His
          1045          1050          1055
Glu Lys Ile His Ser Gly Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly
          1060          1065          1070
Lys Ala Phe Ser Gln Lys Gln Asn Phe Ile Thr His Gln Lys Val His
          1075          1080          1085
Thr Gly Glu Lys Pro Tyr Asp Cys Asn Glu Cys Gly Lys Ala Phe Ser
          1090          1095          1100
Gln Ile Ala Ser Leu Thr Leu His Leu Arg Ser His Thr Gly Glu Lys
1105          1110          1115          1120
Pro Tyr Glu Cys Asp Lys Cys Gly Lys Ala Phe Ser Gln Cys Ser Leu
          1125          1130          1135
Leu Asn Leu His Met Arg Ser His Thr Gly Glu Lys Pro Tyr Val Cys
          1140          1145          1150
Asn Glu Cys Gly Lys Ala Phe Ser Gln Arg Thr Phe Leu Ile Val His
          1155          1160          1165
Met Arg Gly His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly
          1170          1175          1180
Lys Ala Phe Ser Gln Ser Ser Ser Leu Thr Ile His Ile Arg Gly His
1185          1190          1195          1200
Thr Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Arg Lys Ala Phe Ser
          1205          1210          1215
His Lys Lys Asn Phe Ile Thr His Gln Lys Ile His Thr Arg Glu Asn
          1220          1225          1230
Pro Leu Ser Val Ile Ile Val Glu Lys Ala Ser Ile Arg Leu Trp Thr
          1235          1240          1245
Ser Ser Asp Ile
          1250          1252

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<210> 3386

<211> 278

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(276)

<223> Xaa = any amino acid or nothing

<400> 3386

```

Trp Asp Asp Tyr Pro Gln Gly Ala Leu Arg Arg Arg Glu Ala Ala Glu
 1          5          10          15
Gly Leu His Phe Leu Gly Pro Pro Gly Arg Val Arg Gly Gln Leu Arg
          20          25          30
Gly Ile Thr Gly Pro Ala Trp Tyr Cys His Ser Pro Ser His Ser Leu
          35          40          45
Leu Ser Ala Phe Cys His Leu Pro Thr Pro Ser Arg Cys Pro Ala Met
          50          55          60
Ala Arg Pro Pro Val Pro Gly Ser Val Val Val Pro Asn Trp His Glu
          65          70          75          80
Ser Arg Arg Gly Gln Gly Val Pro Gly Leu His Ser Ala Gln Glu Pro

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      85          90          95
Pro Ala Gly Val Trp Ala Ala Xaa Ala Ala Ser Ala Ala Ala Ala Leu
      100          105          110
Ser Ile Asp Thr Ala Ser Tyr Lys Ile Phe Val Ser Gly Lys Ser Gly
      115          120          125
Val Gly Lys Thr Ala Leu Val Ala Lys Leu Ala Gly Leu Glu Val Pro
      130          135          140
Val Val His His Glu Thr Thr Gly Ile Gln Thr Thr Val Val Phe Trp
      145          150          155          160
Pro Ala Lys Leu Gln Ala Ser Ser Arg Val Val Met Phe Arg Phe Glu
      165          170          175
Phe Trp Asp Cys Gly Glu Ser Ala Leu Lys Lys Phe Asp His Met Leu
      180          185          190
Leu Ala Cys Met Glu Asn Thr Asp Ala Phe Leu Phe Leu Phe Ser Phe
      195          200          205
Thr Asp Arg Ala Ser Phe Glu Asp Leu Pro Gly Gln Leu Ala Arg Ile
      210          215          220
Ala Gly Glu Ala Pro Gly Val Val Arg Met Val Ile Gly Ser Lys Phe
      225          230          235          240
Asp Gln Tyr Met His Thr Asp Val Pro Glu Arg Asp Leu Thr Ala Phe
      245          250          255
Arg Gln Ala Trp Glu Leu Pro Leu Leu Arg Val Lys Ser Val Pro Gly
      260          265          270
Arg Arg Leu Gly
      275 276

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<210> 3387

<211> 511

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1) ... (510)

<223> Xaa = any amino acid or nothing

<400> 3387

```

Gly Ser Ser Pro Asp Pro Ala Ser Leu Ile Thr Met Lys Asn Gln Asp
 1      5      10      15
Lys Lys Asn Gly Ala Ala Lys Gln Ser Asn Pro Lys Ser Ser Pro Gly
      20      25      30
Gln Pro Glu Ala Gly Pro Glu Gly Ala Gln Glu Arg Pro Ser Gln Ala
      35      40      45
Ala Pro Ala Val Glu Ala Glu Gly Pro Gly Ser Ser Gln Ala Pro Arg
      50      55      60
Lys Pro Glu Gly Ala Gln Ala Arg Thr Ala Gln Ser Gly Ala Leu Arg
      65      70      75      80
Asp Val Ser Glu Glu Leu Ser Arg Gln Leu Glu Asp Ile Leu Ser Thr
      85      90      95
Tyr Cys Val Asp Asn Asn Gln Gly Gly Pro Gly Glu Asp Gly Ala Gln
      100      105      110
Gly Glu Pro Ala Glu Pro Glu Asp Ala Glu Lys Ser Arg Thr Tyr Val
      115      120      125
Ala Arg Asn Gly Glu Pro Glu Pro Thr Pro Val Val Asn Gly Glu Lys
      130      135      140
Glu Pro Ser Lys Gly Asp Pro Asn Thr Glu Glu Ile Arg Gln Ser Asp
      145      150      155      160
Glu Val Gly Asp Arg Asp His Arg Arg Pro Gln Glu Lys Lys Lys Ala
      165      170      175
Lys Gly Leu Gly Lys Glu Ile Thr Leu Leu Met Gln Thr Leu Asn Thr
      180      185      190
Leu Ser Thr Pro Glu Glu Lys Leu Ala Ala Leu Cys Lys Lys Tyr Ala

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195	200	205
Glu Leu Leu Glu Glu His Arg Asn Ser Gln Lys Gln Met Lys Leu Leu		
210	215	220
Gln Lys Lys Gln Ser Gln Leu Val Gln Glu Lys Asp His Leu Arg Gly		
225	230	235
Glu His Ser Lys Ala Val Leu Ala Arg Ser Lys Leu Glu Ser Leu Cys		
245	250	255
Arg Glu Leu Gln Arg His Asn Arg Ser Leu Lys Glu Glu Gly Val Gln		
260	265	270
Arg Ala Arg Glu Glu Glu Glu Lys Arg Lys Glu Val Thr Ser His Phe		
275	280	285
Gln Val Thr Leu Asn Asp Ile Gln Leu Gln Met Glu Gln His Asn Glu		
290	295	300
Arg Asn Ser Lys Leu Arg Gln Glu Asn Met Glu Leu Ala Glu Arg Leu		
305	310	315
Lys Lys Leu Ile Glu Gln Tyr Glu Leu Arg Glu Glu His Ile Asp Lys		
325	330	335
Val Phe Lys His Lys Asp Leu Gln Gln Leu Val Asp Ala Lys Leu		
340	345	350
Gln Gln Ala Gln Glu Met Leu Lys Glu Ala Glu Glu Arg His Gln Arg		
355	360	365
Glu Lys Asp Phe Leu Leu Lys Glu Ala Val Glu Ser Gln Arg Met Cys		
370	375	380
Glu Leu Met Lys Gln Gln Glu Thr His Leu Lys Gln Gln Leu Ala Leu		
385	390	395
Tyr Thr Glu Lys Phe Glu Glu Phe Gln Asn Thr Leu Ser Lys Ser Ser		
405	410	415
Glu Val Phe Thr Thr Phe Lys Gln Glu Met Glu Lys Met Thr Lys Lys		
420	425	430
Ile Lys Lys Leu Glu Lys Glu Thr Thr Met Tyr Arg Ser Arg Trp Glu		
435	440	445
Ser Ser Asn Lys Ala Leu Leu Glu Met Ala Glu Glu Lys Thr Val Arg		
450	455	460
Asp Lys Glu Leu Glu Gly Leu Gln Val Lys Ile Gln Arg Leu Glu Lys		
465	470	475
Leu Cys Arg Ala Leu Gln Thr Gly Ala Gln Xaa Pro Val Arg Gly Gln		
485	490	495
Arg Trp Gly Ser His Arg Thr Ser Ala Val Arg Ile Phe Ser		
500	505	510

<210> 3388

<211> 1035

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(1033)

<223> Xaa = any amino acid or nothing

<400> 3388

Ala Arg Pro Glu Val Pro Ala Pro Pro Ala Trp Leu Ser Arg Arg Gly
1 5 10 15
Ala Ala Lys Met Gly Asp Lys Lys Asp Asp Lys Asp Ser Pro Lys Lys
20 25 30
Asn Lys Gly Lys Glu Arg Arg Asp Leu Asp Asp Leu Lys Lys Glu Val
35 40 45
Ala Met Thr Glu His Lys Met Ser Val Glu Glu Val Cys Arg Lys Tyr
50 55 60
Asn Thr Asp Cys Val Gln Gly Leu Thr His Ser Lys Ala Gln Glu Ile
65 70 75 80
Leu Ala Arg Asp Gly Pro Asn Ala Leu Thr Pro Pro Pro Thr Thr Pro

[illegible]


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      595      600      605
Val Pro Asp Ala Val Gly Lys Cys Arg Ser Ala Gly Ile Lys Val Ile
  610      615      620
Met Val Thr Gly Asp His Pro Ile Thr Ala Lys Ala Ile Ala Lys Gly
  625      630      635      640
Val Gly Ile Ile Phe Glu Gly Asn Glu Thr Val Glu Asp Ile Ala Ala
      645      650      655
Arg Leu Asn Ile Pro Val Ser Gln Val Asn Pro Arg Asp Ala Lys Ala
      660      665      670
Cys Val Ile His Gly Thr Asp Leu Lys Asp Phe Thr Ser Glu Gln Ile
      675      680      685
Asp Glu Ile Leu Gln Asn His Thr Glu Ile Val Phe Ala Arg Thr Ser
      690      695      700
Pro Gln Gln Lys Leu Ile Ile Val Glu Gly Cys Gln Arg Gln Gly Ala
  705      710      715      720
Ile Val Ala Val Thr Gly Asp Gly Val Asn Asp Ser Pro Ala Leu Lys
      725      730      735
Lys Ala Asp Ile Gly Val Ala Met Gly Ile Ala Gly Ser Asp Val Ser
      740      745      750
Lys Gln Ala Ala Asp Met Ile Leu Leu Asp Asp Asn Phe Ala Ser Ile
      755      760      765
Val Thr Gly Val Glu Glu Gly Arg Leu Ile Phe Asp Asn Leu Lys Lys
  770      775      780
Ser Ile Ala Tyr Thr Leu Thr Ser Asn Ile Pro Glu Ile Thr Pro Phe
  785      790      795      800
Leu Leu Phe Ile Met Ala Asn Ile Pro Leu Pro Leu Gly Thr Ile Thr
      805      810      815
Ile Leu Cys Ile Asp Leu Gly Thr Asp Met Val Pro Ala Ile Ser Leu
      820      825      830
Ala Tyr Glu Ala Ala Glu Ser Asp Ile Met Lys Arg Gln Pro Arg Asn
      835      840      845
Pro Arg Thr Asp Lys Leu Val Asn Glu Arg Leu Ile Ser Met Ala Tyr
  850      855      860
Gly Gln Ile Gly Met Ile Gln Ala Leu Gly Gly Phe Phe Ser Tyr Phe
  865      870      875      880
Val Ile Leu Ala Glu Asn Gly Phe Leu Pro Gly Asn Leu Val Gly Ile
      885      890      895
Arg Leu Asn Trp Asp Asp Arg Thr Val Asn Asp Leu Glu Asp Ser Tyr
      900      905      910
Gly Gln Gln Trp Thr Tyr Glu Gln Arg Lys Val Val Glu Phe Thr Cys
      915      920      925
His Thr Ala Phe Phe Val Ser Ile Val Val Val Gln Trp Ala Asp Leu
  930      935      940
Ile Ile Cys Lys Thr Arg Arg Asn Ser Val Phe Gln Gln Gly Met Lys
  945      950      955      960
Asn Lys Ile Leu Ile Phe Gly Leu Phe Glu Glu Thr Ala Leu Ala Ala
      965      970      975
Phe Leu Ser Tyr Cys Pro Gly Met Asp Val Ala Leu Arg Met Tyr Pro
      980      985      990
Leu Lys Pro Ser Trp Trp Phe Cys Ala Phe Pro Tyr Ser Phe Leu Ile
      995      1000      1005
Phe Val Tyr Asp Glu Ile Arg Lys Leu Ile Leu Arg Arg Asn Pro Gly
  1010      1015      1020
Gly Trp Val Glu Lys Glu Thr Tyr Tyr
  1025      1030      1033

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<210> 3389

<211> 1742

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1) ... (1736)

<223> Xaa = any amino acid or nothing

<400> 3389

Val	Glu	Arg	Leu	Gly	Cys	Arg	Asn	Ser	Lys	Arg	Thr	Trp	Arg	Met
1				5				10					15	
Leu	Ile	Ser	Lys	Asn	Met	Pro	Trp	Arg	Arg	Leu	Gln	Gly	Ile	Ser
			20					25					30	Phe
Gly	Met	Tyr	Ser	Ala	Glu	Glu	Leu	Lys	Lys	Leu	Ser	Val	Lys	Ser
		35					40					45		Ile
Thr	Asn	Pro	Arg	Tyr	Leu	Asp	Ser	Leu	Gly	Asn	Pro	Ser	Ala	Asn
	50					55					60			Gly
Leu	Tyr	Asp	Leu	Ala	Leu	Gly	Pro	Ala	Asp	Ser	Lys	Glu	Val	Cys
	65				70					75				80
Thr	Cys	Val	Gln	Asp	Phe	Ser	Asn	Cys	Ser	Gly	His	Leu	Gly	His
			85					90						95
Glu	Leu	Pro	Leu	Thr	Val	Tyr	Asn	Pro	Leu	Leu	Phe	Asp	Lys	Leu
		100						105					110	Tyr
Leu	Leu	Leu	Arg	Gly	Ser	Cys	Leu	Asn	Cys	His	Met	Leu	Thr	Cys
	115						120					125		Pro
Arg	Ala	Val	Ile	His	Leu	Leu	Leu	Cys	Gln	Leu	Arg	Val	Leu	Glu
	130					135					140			Val
Gly	Ala	Leu	Gln	Ala	Val	Tyr	Glu	Leu	Glu	Arg	Ile	Leu	Asn	Arg
	145				150					155				160
Leu	Glu	Glu	Asn	Pro	Asp	Pro	Ser	Ala	Ser	Glu	Ile	Arg	Glu	Glu
			165						170					175
Glu	Gln	Tyr	Thr	Thr	Glu	Ile	Val	Gln	Asn	Asn	Leu	Leu	Gly	Ser
		180						185					190	Gln
Gly	Ala	His	Val	Lys	Asn	Val	Cys	Glu	Ser	Lys	Ser	Lys	Leu	Ile
	195					200						205		Ala
Leu	Phe	Trp	Lys	Ala	His	Met	Asn	Ala	Lys	Arg	Cys	Pro	His	Cys
	210					215					220			Lys
Thr	Gly	Arg	Ser	Val	Val	Arg	Lys	Glu	His	Asn	Ser	Lys	Leu	Thr
	225				230					235				240
Thr	Phe	Pro	Ala	Met	Val	His	Arg	Thr	Ala	Gly	Gln	Lys	Asp	Ser
			245						250					255
Pro	Leu	Gly	Ile	Glu	Glu	Ala	Gln	Ile	Gly	Lys	Arg	Gly	Tyr	Leu
		260						265					270	Thr
Pro	Thr	Ser	Ala	Arg	Glu	His	Leu	Ser	Ala	Leu	Trp	Lys	Asn	Glu
		275					280						285	Gly
Phe	Phe	Leu	Asn	Tyr	Leu	Phe	Ser	Gly	Met	Asp	Asp	Asp	Gly	Met
	290					295					300			Glu
Ser	Arg	Phe	Asn	Pro	Ser	Val	Phe	Phe	Leu	Asp	Phe	Leu	Val	Val
	305				310					315				320
Pro	Ser	Arg	Tyr	Arg	Pro	Val	Ser	Arg	Leu	Gly	Asp	Gln	Met	Phe
			325						330					335
Asn	Gly	Gln	Thr	Val	Asn	Leu	Gln	Ala	Val	Met	Lys	Asp	Val	Val
		340						345					350	Leu
Ile	Arg	Lys	Leu	Leu	Ala	Leu	Met	Ala	Gln	Glu	Gln	Lys	Leu	Pro
		355					360					365		Glu
Glu	Val	Ala	Thr	Pro	Thr	Thr	Asp	Glu	Glu	Lys	Asp	Ser	Leu	Ile
	370					375					380			Ala
Ile	Asp	Arg	Ser	Phe	Leu	Ser	Thr	Leu	Pro	Gly	Gln	Ser	Leu	Ile
	385				390					395				400
Lys	Leu	Tyr	Asn	Ile	Trp	Ile	Arg	Leu	Gln	Ser	His	Val	Asn	Ile
			405						410					415
Phe	Asp	Ser	Glu	Met	Asp	Lys	Leu	Met	Met	Asp	Lys	Tyr	Pro	Gly
			420					425					430	Ile
Arg	Gln	Ile	Leu	Glu	Lys	Lys	Glu	Gly	Leu	Phe	Arg	Lys	His	Met
		435					440					445		Met
Gly	Lys	Arg	Val	Asp	Tyr	Ala	Ala	Arg	Ser	Val	Ile	Cys	Pro	Asp
	450					455					460			Met
Tyr	Ile	Asn	Thr	Asn	Glu	Ile	Gly	Ile	Pro	Met	Val	Phe	Ala	Thr
														Lys

465		470		475		480
Leu Thr Tyr Pro Gln	Pro Val Thr Pro Trp Asn Val Gln Glu Leu Arg					
	485		490			495
Gln Ala Val Ile Asn Gly Pro Asn Val His Pro Gly Ala Ser Met Val						
	500		505			510
Ile Asn Glu Asp Gly Ser Arg Thr Ala Leu Ser Ala Val Asp Met Thr						
	515		520			525
Gln Arg Glu Ala Val Ala Lys Gln Leu Leu Thr Pro Ala Thr Gly Ala						
	530		535			540
Pro Lys Pro Gln Gly Thr Lys Ile Val Cys Arg His Val Lys Asn Gly						
	545		550			560
Asp Ile Leu Leu Leu Asn Arg Gln Pro Thr Leu His Arg Pro Ser Ile						
	565		570			575
Gln Ala His Arg Ala Arg Ile Leu Pro Glu Glu Lys Val Leu Arg Leu						
	580		585			590
His Tyr Ala Asn Cys Lys Ala Tyr Asn Ala Asp Phe Asp Gly Asp Glu						
	595		600			605
Met Asn Ala His Phe Pro Gln Ser Glu Leu Gly Arg Ala Glu Ala Tyr						
	610		615			620
Val Leu Ala Cys Thr Asp Gln Gln Tyr Leu Val Pro Lys Asp Gly Gln						
	625		630			635
Pro Leu Ala Gly Leu Ile Gln Asp His Met Val Ser Gly Ala Ser Met						
	645		650			655
Thr Thr Arg Gly Cys Phe Phe Thr Arg Glu His Tyr Met Glu Leu Val						
	660		665			670
Tyr Arg Gly Leu Thr Asp Lys Val Gly Arg Val Lys Leu Leu Ser Pro						
	675		680			685
Ser Ile Leu Lys Pro Phe Pro Leu Trp Thr Gly Lys Gln Val Val Ser						
	690		695			700
Thr Leu Leu Ile Asn Ile Ile Pro Glu Asp His Ile Pro Leu Asn Leu						
	705		710			715
Ser Gly Lys Ala Lys Ile Thr Gly Lys Ala Trp Val Lys Glu Thr Pro						
	725		730			735
Arg Ser Val Pro Gly Phe Asn Pro Asp Ser Met Cys Glu Ser Gln Val						
	740		745			750
Ile Ile Arg Glu Gly Glu Leu Leu Cys Gly Val Leu Asp Lys Ala His						
	755		760			765
Tyr Gly Ser Ser Ala Tyr Gly Leu Val His Cys Cys Tyr Glu Ile Tyr						
	770		775			780
Gly Gly Glu Thr Ser Gly Lys Val Leu Thr Cys Leu Ala Arg Leu Phe						
	785		790			795
Thr Ala Tyr Leu Gln Leu Tyr Arg Gly Phe Thr Leu Gly Val Glu Asp						
	805		810			815
Ile Leu Val Lys Pro Lys Ala Asp Val Lys Arg Gln Arg Ile Ile Glu						
	820		825			830
Glu Ser Thr His Cys Gly Pro Gln Ala Val Arg Ala Ala Leu Asn Leu						
	835		840			845
Pro Glu Ala Ala Ser Tyr Asp Glu Val Arg Gly Lys Trp Gln Asp Ala						
	850		855			860
His Leu Gly Lys Asp Gln Arg Asp Phe Asn Met Ile Asp Leu Lys Phe						
	865		870			875
Lys Glu Glu Val Asn His Tyr Ser Asn Glu Ile Asn Lys Ala Cys Met						
	885		890			895
Pro Phe Gly Leu His Arg Gln Phe Pro Glu Asn Thr Leu Gln Leu Met						
	900		905			910
Val Gln Ser Gly Ala Lys Gly Ser Thr Val Asn Thr Met Gln Ile Ser						
	915		920			925
Cys Leu Leu Gly Gln Ile Glu Leu Glu Gly Arg Ser Thr Pro Leu Met						
	930		935			940
Ala Ser Gly Lys Ser Leu Pro Cys Phe Glu Pro Tyr Glu Phe Thr Pro						
	945		950			955
Arg Ala Gly Gly Phe Val Thr Gly Arg Phe Leu Thr Gly Ile Lys Pro						
	965		970			975
Pro Glu Phe Phe Phe His Cys Met Ala Gly Arg Glu Gly Leu Val Asp						

	980		985		990										
Thr	Ala	Val	Lys	Thr	Ser	Arg	Ser	Gly	Tyr	Leu	Gln	Arg	Cys	Ile	Ile
	995						1000					1005			
Lys	His	Leu	Glu	Gly	Leu	Val	Val	Gln	Tyr	Asp	Leu	Thr	Val	Arg	Asp
	1010						1015					1020			
Ser	Asp	Gly	Ser	Val	Val	Gln	Phe	Leu	Tyr	Gly	Glu	Asp	Gly	Leu	Asp
1025						1030				1035				1040	
Ile	Pro	Lys	Thr	Gln	Phe	Leu	Gln	Pro	Lys	Gln	Phe	Pro	Phe	Leu	Ala
				1045					1050					1055	
Ser	Asn	Tyr	Glu	Val	Ile	Met	Lys	Ser	Gln	His	Leu	His	Glu	Val	Leu
			1060						1065					1070	
Ser	Arg	Ala	Asp	Pro	Lys	Lys	Ala	Leu	His	His	Phe	Arg	Ala	Ile	Lys
	1075						1080					1085			
Lys	Trp	Gln	Ser	Lys	His	Pro	Asn	Thr	Leu	Leu	Arg	Arg	Gly	Ala	Phe
	1090					1095					1100				
Leu	Ser	Tyr	Ser	Gln	Lys	Ile	Gln	Glu	Ala	Val	Lys	Ala	Leu	Lys	Leu
1105					1110					1115				1120	
Glu	Ser	Glu	Asn	Arg	Asn	Gly	Arg	Arg	Pro	Trp	Asp	Ser	Gly	Arg	Met
				1125					1130					1135	
Leu	Arg	Met	Trp	Tyr	Glu	Leu	Asp	Glu	Glu	Ser	Arg	Arg	Lys	Tyr	Gln
		1140						1145					1150		
Lys	Lys	Ala	Ala	Ala	Cys	Pro	Asp	Pro	Ser	Leu	Ser	Val	Trp	Arg	Pro
	1155						1160					1165			
Asp	Ile	Tyr	Phe	Ala	Ser	Val	Ser	Glu	Thr	Phe	Glu	Thr	Lys	Val	Asp
	1170					1175					1180				
Asp	Tyr	Ser	Gln	Glu	Trp	Ala	Ala	Gln	Thr	Glu	Lys	Ser	Tyr	Glu	Lys
1185				1190						1195				1200	
Ser	Glu	Leu	Ser	Leu	Asp	Arg	Leu	Arg	Thr	Leu	Leu	Gln	Leu	Lys	Trp
			1205						1210				1215		
Gln	Arg	Ser	Leu	Cys	Glu	Pro	Gly	Glu	Ala	Val	Gly	Leu	Leu	Ala	Ala
			1220					1225					1230		
Gln	Ser	Ile	Gly	Glu	Pro	Ser	Thr	Gln	Met	Thr	Leu	Asn	Thr	Phe	His
		1235					1240					1245			
Phe	Ala	Gly	Arg	Gly	Glu	Met	Asn	Val	Thr	Leu	Gly	Ile	Pro	Arg	Leu
	1250					1255					1260				
Arg	Glu	Ile	Leu	Met	Val	Ala	Ser	Ala	Asn	Ile	Lys	Thr	Pro	Met	Met
1265				1270						1275				1280	
Ser	Val	Pro	Val	Leu	Asn	Thr	Lys	Lys	Ala	Leu	Lys	Arg	Val	Lys	Ser
			1285						1290					1295	
Leu	Lys	Lys	Gln	Leu	Thr	Arg	Val	Cys	Leu	Gly	Glu	Val	Leu	Gln	Lys
		1300						1305				1310			
Ile	Asp	Val	Gln	Glu	Ser	Phe	Cys	Met	Glu	Glu	Lys	Gln	Asn	Lys	Phe
	1315						1320					1325			
Gln	Val	Tyr	Gln	Leu	Arg	Phe	Gln	Phe	Leu	Pro	His	Ala	Tyr	Tyr	Gln
	1330					1335					1340				
Gln	Glu	Lys	Cys	Leu	Arg	Pro	Glu	Asp	Ile	Leu	Arg	Phe	Met	Glu	Thr
1345				1350						1355				1360	
Arg	Phe	Phe	Lys	Leu	Met	Glu	Ser	Ile	Lys	Lys	Lys	Asn	Asn	Lys	
			1365					1370					1375		
Ala	Ser	Ala	Phe	Arg	Asn	Val	Asn	Thr	Arg	Arg	Ala	Thr	Gln	Arg	Asp
		1380						1385				1390			
Leu	Asp	Asn	Ala	Gly	Glu	Leu	Gly	Arg	Ser	Arg	Gly	Glu	Gln	Glu	Gly
	1395					1400					1405				
Asp	Glu	Glu	Glu	Gly	His	Ile	Val	Asp	Ala	Glu	Ala	Glu	Glu	Gly	
	1410				1415						1420				
Asp	Ala	Asp	Ala	Ser	Asp	Ala	Lys	Arg	Lys	Glu	Lys	Gln	Glu	Glu	Glu
1425				1430					1435					1440	
Val	Asp	Tyr	Glu	Ser	Glu	Glu	Glu	Glu	Glu	Arg	Glu	Gly	Glu	Glu	Asn
			1445						1450				1455		
Asp	Asp	Glu	Asp	Met	Gln	Glu	Glu	Arg	Asn	Pro	His	Arg	Glu	Gly	Ala
		1460						1465				1470			
Arg	Lys	Thr	Gln	Glu	Gln	Asp	Glu	Val	Gly	Leu	Gly	His	Xaa	Gly	
	1475					1480					1485				
Gly	Pro	Val	Pro	Ser	Arg	Pro	Pro	Asp	Ala	Ala	Pro	Glu	Thr	His	Pro

1490 1495 1500
 Gln Pro Gly Ala Pro Gly Ala Glu Ala Met Glu Arg Arg Val Gln Ala
 1505 1510 1515 1520
 Val Arg Glu Ile His Pro Phe Ile Asp Asp Tyr Gln Tyr Asp Thr Glu
 1525 1530 1535
 Glu Ser Leu Trp Cys Gln Val Thr Val Lys Leu Pro Leu Met Lys Ile
 1540 1545 1550
 Asn Phe Asp Met Ser Ser Leu Val Val Ser Leu Ala His Gly Ala Val
 1555 1560 1565
 Ile Tyr Ala Thr Lys Gly Ile Thr Arg Cys Leu Leu Asn Glu Thr Thr
 1570 1575 1580
 Asn Asn Lys Asn Glu Lys Glu Leu Val Leu Asn Thr Glu Gly Ile Asn
 1585 1590 1595 1600
 Leu Pro Glu Leu Phe Lys Tyr Ala Glu Val Leu Asp Leu Arg Arg Leu
 1605 1610 1615
 Tyr Ser Asn Asp Ile His Ala Ile Ala Asn Thr Tyr Gly Ile Glu Ala
 1620 1625 1630
 Ala Leu Arg Val Ile Glu Lys Glu Ile Lys Asp Val Phe Ala Val Tyr
 1635 1640 1645
 Gly Ile Ala Val Asp Pro Arg His Leu Ser Leu Val Ala Asp Tyr Met
 1650 1655 1660
 Cys Phe Glu Gly Val Tyr Lys Pro Leu Asn Arg Phe Gly Ile Arg Ser
 1665 1670 1675 1680
 Asn Ser Ser Pro Leu Gln Gln Met Thr Phe Glu Thr Ser Phe Gln Phe
 1685 1690 1695
 Leu Lys Gln Ala Thr Met Leu Gly Ser His Asp Glu Leu Arg Ser Pro
 1700 1705 1710
 Ser Ala Cys Leu Val Val Gly Lys Val Val Arg Gly Gly Thr Gly Leu
 1715 1720 1725
 Phe Glu Leu Lys Gln Pro Leu Arg
 1730 1735 1736

<210> 3390

<211> 700

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(690)

<223> Xaa = any amino acid or nothing

<400> 3390

Ile Leu Pro Pro Leu Glu Gly Pro Pro Ala Gln Ala Ser Pro Ser Ser
 1 5 10 15
 Thr Met Leu Gly Glu Gly Ser Gln Pro Asp Trp Pro Gly Gly Ser Arg
 20 25 30
 Tyr Asp Leu Asp Glu Ile Asp Ala Tyr Trp Leu Glu Leu Ile Asn Ser
 35 40 45
 Glu Leu Lys Glu Met Glu Arg Pro Glu Leu Asp Glu Leu Thr Leu Glu
 50 55 60
 Arg Val Leu Glu Glu Leu Glu Thr Leu Cys His Gln Asn Met Ala Arg
 65 70 75 80
 Ala Ile Glu Thr Gln Glu Gly Leu Gly Ile Glu Tyr Asp Glu Asp Val
 85 90 95
 Val Cys Asp Val Cys Arg Ser Pro Glu Gly Glu Asp Gly Asn Glu Met
 100 105 110
 Val Phe Cys Asp Lys Cys Asn Val Cys Val His Gln Ala Cys Tyr Gly
 115 120 125
 Ile Leu Lys Val Pro Thr Gly Ser Trp Leu Cys Arg Thr Cys Ala Leu
 130 135 140
 Gly Val Gln Pro Lys Cys Leu Leu Cys Pro Lys Arg Gly Gly Ala Leu

145	Lys	Pro	Thr	Arg	Ser	150	Gly	Thr	Lys	Trp	Val	155	His	Val	Ser	Cys	Ala	160	Leu
					165							170						175	
	Trp	Ile	Pro	Glu	Val	Ser	Ile	Gly	Cys	Pro	Glu	Lys	Met	Glu	Pro	Ile			
				180					185							190			
	Thr	Lys	Ile	Ser	His	Ile	Pro	Ala	Ser	Arg	Trp	Ala	Leu	Ser	Cys	Ser			
			195					200					205						
	Leu	Cys	Lys	Glu	Cys	Thr	Gly	Thr	Cys	Ile	Gln	Cys	Ser	Met	Pro	Ser			
		210					215					220							
	Cys	Val	Thr	Ala	Phe	His	Val	Thr	Cys	Ala	Phe	Asp	His	Gly	Leu	Glu			
225						230					235					240			
	Met	Arg	Thr	Ile	Leu	Ala	Asp	Asn	Asp	Glu	Val	Lys	Phe	Lys	Ser	Phe			
				245						250					255				
	Cys	Gln	Glu	His	Ser	Asp	Gly	Gly	Pro	Arg	Asn	Glu	Pro	Thr	Ser	Glu			
			260					265						270					
	Pro	Thr	Glu	Pro	Ser	Gln	Ala	Gly	Glu	Asp	Leu	Glu	Lys	Val	Thr	Leu			
		275					280						285						
	Arg	Lys	Gln	Arg	Leu	Gln	Gln	Leu	Glu	Glu	Asp	Phe	Tyr	Glu	Leu	Val			
		290					295					300							
	Glu	Pro	Ala	Glu	Val	Ala	Glu	Arg	Leu	Asp	Leu	Ala	Glu	Ala	Leu	Val			
305						310					315					320			
	Asp	Phe	Ile	Tyr	Gln	Tyr	Trp	Lys	Leu	Lys	Arg	Lys	Ala	Asn	Ala	Asn			
				325					330						335				
	Gln	Pro	Leu	Leu	Thr	Pro	Lys	Thr	Asp	Glu	Val	Asp	Asn	Leu	Ala	Gln			
			340					345						350					
	Gln	Glu	Gln	Asp	Val	Leu	Tyr	Arg	Arg	Leu	Lys	Leu	Phe	Thr	His	Leu			
		355					360						365						
	Arg	Gln	Asp	Leu	Glu	Arg	Val	Arg	Asn	Leu	Cys	Tyr	Met	Val	Thr	Arg			
		370					375					380							
	Arg	Glu	Arg	Thr	Lys	His	Ala	Ile	Cys	Lys	Leu	Gln	Glu	Gln	Ile	Phe			
385						390					395					400			
	His	Leu	Gln	Met	Lys	Leu	Ile	Glu	Gln	Asp	Leu	Cys	Arg	Ala	Gly	Leu			
				405					410						415				
	Ser	Thr	Ser	Phe	Pro	Ile	Asp	Gly	Thr	Phe	Phe	Asn	Ser	Trp	Leu	Ala			
			420					425						430					
	Gln	Ser	Val	Gln	Ile	Thr	Ala	Glu	Asn	Met	Ala	Met	Ser	Glu	Trp	Pro			
		435					440					445							
	Leu	Asn	Asn	Gly	His	Arg	Glu	Asp	Pro	Ala	Pro	Gly	Leu	Leu	Ser	Glu			
		450					455					460							
	Glu	Leu	Leu	Gln	Asp	Glu	Glu	Thr	Leu	Leu	Ser	Phe	Met	Arg	Asp	Pro			
465						470					475					480			
	Ser	Leu	Arg	Pro	Gly	Asp	Pro	Ala	Arg	Lys	Ala	Arg	Gly	Arg	Thr	Arg			
				485					490						495				
	Leu	Pro	Ala	Lys	Lys	Lys	Pro	Pro	Pro	Pro	Pro	Pro	Gln	Asp	Gly	Pro			
			500					505						510					
	Gly	Ser	Arg	Thr	Thr	Pro	Asp	Lys	Ala	Pro	Lys	Lys	Thr	Trp	Gly	Gln			
		515					520						525						
	Asp	Ala	Gly	Ser	Gly	Lys	Gly	Gly	Gln	Gly	Pro	Pro	Thr	Arg	Lys	Pro			
		530					535					540							
	Pro	Arg	Arg	Thr	Ser	Ser	His	Leu	Pro	Ser	Ser	Pro	Ala	Ala	Gly	Asp			
545						550					555					560			
	Cys	Pro	Ile	Leu	Ala	Thr	Pro	Glu	Ser	Pro	Pro	Pro	Leu	Ala	Pro	Glu			
				565					570						575				
	Thr	Pro	Asp	Glu	Ala	Ala	Ser	Val	Ala	Ala	Asp	Ser	Asp	Val	Gln	Val			
			580					585					590						
	Pro	Gly	Pro	Ala	Ala	Ser	Pro	Lys	Pro	Leu	Gly	Arg	Leu	Arg	Pro	Pro			
		595					600					605							
	Pro	Arg	Glu	Pro	Arg	Xaa	Thr	Arg	Arg	Leu	Pro	Gly	Cys	Ala	Arg	Pro			
		610					615					620							
	Asp	Ala	Gly	Asp	Gly	Asp	His	Leu	Ser	Ala	Val	Ala	Glu	Arg	Pro	Lys			
625						630					635					640			
	Val	Ser	Leu	His	Phe	Asp	Thr	Glu	Thr	Asp	Gly	Tyr	Phe	Ser	Asp	Gly			
				645					650						655				
	Glu	Met	Ser	Asn	Ser	Asp	Val	Glu	Ala	Glu	Asp	Gly	Gly	Val	Gln	Arg			

660 665 670
 Gly Pro Arg Glu Ala Gly Ala Lys Glu Val Val Arg Met Gly Val Leu
 675 680 685
 Ala Ser
 690

<210> 3391

<211> 410

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(409)

<223> Xaa = any amino acid or nothing

<400> 3391

Asn Ser Phe Leu His Phe Leu His Leu Lys Val Arg Thr Met Phe Leu
 1 5 10 15
 Phe Pro Ser Phe Pro Val Leu Leu Leu Ser Val Val Thr Ala Ser Cys
 20 25 30
 Ser Lys Thr Lys Ala Cys Ala Asp Thr Gln Lys Thr Cys Ser Met Ile
 35 40 45
 Thr Cys Gly Ile Pro Val Thr Asn Gly Thr Pro Gly Arg Asp Gly Arg
 50 55 60
 Asp Arg Pro Lys Gly Glu Lys Gly Glu Pro Gly Leu Gly Gln Val Ser
 65 70 75 80
 Val Ala Ser Xaa Ile Ser Thr Ser Gly Arg Cys Ser Ser Lys Ser Val
 85 90 95
 Leu Glu Pro Ala Thr Arg Gly Leu Lys His Arg Leu Gly Glu Ala Pro
 100 105 110
 Leu Ser Ser Gly Pro Met Leu His Ser Glu Gln Pro Leu Xaa Asn Ala
 115 120 125
 Ile Ala Ser Lys Thr Lys Leu Phe Val Asp Ser Leu Gly Ser His Ile
 130 135 140
 Ser Thr Gln Glu Leu Gly Val Cys Gly Cys Pro Phe Arg Gly Val Ser
 145 150 155 160
 Cys Leu Val Gly Glu Leu Ala Leu Val Gln Ala Leu His Xaa Val Ala
 165 170 175
 Gly Glu Ser Phe Phe Phe Gly Ser Asp His Trp Leu Ile Gly Cys Ala
 180 185 190
 Gly Gly Glu Gln Glu Trp Ser Ile Glu Leu Leu Gly Lys Lys Lys Arg
 195 200 205
 Val Thr Ala Thr Gly Ser Ser Ser Leu Cys Leu Ala Thr Gly Gln Gly
 210 215 220
 Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Met Gly Pro Pro Gly Asn
 225 230 235 240
 Thr Gly Thr Ser Gly Ile Pro Gly Pro Arg Gly Gln Lys Gly Asp Arg
 245 250 255
 Gly Asp Asn Ser Val Ala Glu Ala Lys Leu Ala Asn Leu Glu Arg Lys
 260 265 270
 Leu Xaa Ser Leu Arg Ser Glu Leu Asp His Thr Lys Lys Leu Xaa Pro
 275 280 285
 Phe Ser Leu Gly Lys Met Ser Gly Lys Lys Leu Phe Val Thr Asn Gly
 290 295 300
 Glu Arg Met Pro Phe Ser Lys Val Lys Ala Leu Cys Ala Gly Leu Gln
 305 310 315 320
 Ala Thr Val Ala Ala Pro Lys Asn Ala Glu Asn Lys Ala Ile Gln
 325 330 335
 Asp Val Ala Lys Asp Thr Ala Phe Leu Gly Ile Thr Asp Glu Ala Thr
 340 345 350
 Glu Gly Gln Phe Met Tyr Leu Thr Gly Gly Arg Leu Thr Tyr Ser Asn

	355		360		365										
Trp	Lys	Lys	Asp	Glu	Pro	Asn	Asp	His	Gly	Ser	Gly	Glu	Asp	Cys	Val
	370					375					380				
Ile	Leu	Leu	Asn	Asn	Gly	Leu	Trp	Asn	Gly	Ile	Ser	Cys	Thr	Ser	Ser
	385				390					395					400
Phe	Ile	Ala	Ile	Cys	Glu	Phe	Pro	Ala							
				405				409							

<210> 3392

<211> 520

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(519)

<223> Xaa = any amino acid or nothing

<400> 3392

Gly	Gly	Ser	Arg	Arg	Asn	Gln	Arg	Arg	Ser	Ile	Pro	Val	Leu	Gly	Tyr
1				5					10					15	
Phe	Leu	Lys	Gln	Lys	Lys	Met	Thr	Lys	Ala	Gln	Glu	Ser	Leu	Thr	Leu
		20						25					30		
Glu	Asp	Val	Ala	Val	Asp	Phe	Thr	Trp	Glu	Glu	Trp	Gln	Phe	Leu	Ser
		35					40					45			
Pro	Ala	Gln	Lys	Asp	Leu	Tyr	Arg	Asp	Val	Met	Leu	Glu	Asn	Tyr	Ser
		50				55					60				
Asn	Leu	Val	Ser	Val	Gly	Tyr	Gln	Ala	Gly	Lys	Pro	Asp	Ala	Leu	Thr
	65				70					75				80	
Lys	Leu	Glu	Gln	Gly	Glu	Pro	Leu	Trp	Thr	Leu	Glu	Asp	Glu	Ile	His
			85						90					95	
Ser	Pro	Ala	His	Pro	Glu	Ile	Glu	Lys	Ala	Asp	Asp	His	Leu	Gln	Gln
		100						105					110		
Pro	Leu	Gln	Asn	Gln	Lys	Ile	Leu	Lys	Arg	Thr	Gly	Gln	Arg	Tyr	Glu
		115					120					125			
His	Gly	Arg	Thr	Leu	Lys	Ser	Tyr	Leu	Gly	Leu	Thr	Asn	Gln	Ser	Arg
	130				135						140				
Arg	Tyr	Asn	Arg	Lys	Glu	Pro	Ala	Glu	Phe	Asn	Gly	Asp	Gly	Ala	Phe
	145				150					155				160	
Leu	His	Asp	Asn	His	Glu	Gln	Met	Pro	Thr	Glu	Ile	Glu	Phe	Pro	Glu
			165						170					175	
Ser	Arg	Lys	Pro	Ile	Ser	Thr	Lys	Ser	Gln	Phe	Leu	Lys	His	Gln	Gln
		180					185						190		
Thr	His	Asn	Ile	Glu	Lys	Ala	His	Glu	Cys	Thr	Asp	Cys	Gly	Lys	Ala
	195					200						205			
Phe	Leu	Lys	Lys	Ser	Gln	Leu	Thr	Glu	His	Lys	Arg	Ile	His	Thr	Gly
	210				215						220				
Lys	Lys	Pro	His	Val	Cys	Ser	Leu	Cys	Gly	Lys	Ala	Phe	Tyr	Lys	Lys
	225				230					235				240	
Tyr	Arg	Leu	Thr	Glu	His	Glu	Arg	Ala	His	Arg	Gly	Glu	Lys	Pro	His
				245					250					255	
Gly	Cys	Ser	Leu	Cys	Gly	Lys	Ala	Phe	Tyr	Lys	Arg	Tyr	Arg	Leu	Thr
		260					265					270			
Glu	His	Glu	Arg	Ala	His	Lys	Gly	Glu	Lys	Pro	Tyr	Gly	Cys	Ser	Glu
	275					280						285			
Cys	Gly	Lys	Ala	Phe	Pro	Arg	Lys	Ser	Glu	Leu	Thr	Glu	His	Gln	Arg
	290				295						300				
Ile	His	Thr	Gly	Ile	Lys	Pro	His	Gln	Cys	Ser	Glu	Cys	Gly	Arg	Ala
	305				310					315				320	
Phe	Ser	Arg	Lys	Ser	Leu	Leu	Val	Val	His	Gln	Arg	Thr	His	Thr	Gly
				325					330				335		
Glu	Lys	Pro	His	Thr	Cys	Ser	Glu	Cys	Gly	Lys	Gly	Phe	Ile	Gln	Lys


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      340      345      350
Gly Asn Leu Asn Ile His Gln Arg Thr His Thr Gly Glu Lys Pro Tyr
      355      360      365
Gly Cys Ile Asp Cys Gly Lys Ala Phe Ser Gln Lys Ser Cys Leu Val
      370      375      380
Ala His Gln Arg Tyr His Thr Gly Lys Thr Pro Phe Val Cys Pro Glu
385      390      395      400
Cys Gly Gln Pro Cys Ser Gln Lys Ser Gly Leu Ile Arg His Gln Lys
      405      410      415
Ile His Ser Gly Glu Lys Pro Tyr Lys Cys Ser Asp Cys Gly Lys Ala
      420      425      430
Phe Leu Thr Lys Thr Met Leu Ile Val His His Arg Thr His Thr Gly
      435      440      445
Glu Arg Pro Tyr Gly Cys Asp Glu Cys Glu Lys Ala Tyr Phe Tyr Met
450      455      460
Ser Cys Leu Val Lys His Lys Arg Ile His Ser Arg Glu Lys Arg Gly
465      470      475      480
Asp Cys Ser Glu Gly Lys Ser Phe His Ser Lys Ser Gln Leu Lys
      485      490      495
Ser Xaa Xaa Thr Cys Ala Gly Glu Lys Pro Cys Xaa Tyr Gly Asn Cys
500      505      510
Gly Asn Gly Gly Arg Ala Val
515      519

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<210> 3393

<211> 483

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1) ... (468)

<223> Xaa = any amino acid or nothing

<400> 3393

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Ala Arg Ser Leu Ser Gly Ala Pro Ser Gly Ser Ser Arg Gln Asp Gly
1      5      10      15
Thr Ser Leu Leu Arg Thr Gly Ala Gly Tyr Ser Ser Ser Gln Ser Ile
      20      25      30
Glu Thr Leu Ser Leu Pro Pro Gly Pro Ser His Leu Val Gly Asp Lys
      35      40      45
Ser Gln Gly Gly Arg Ser Cys Gln Gly Gln Ile Thr Ser Ala Ala Ser
50      55      60
Gly Lys Thr Ser Lys Ser Glu Pro Asn His Val Ile Phe Lys Lys Ile
65      70      75      80
Ser Arg Asp Lys Ser Val Thr Ile Tyr Leu Gly Asn Arg Asp Tyr Ile
      85      90      95
Asp His Val Ser Gln Val Gln Pro Val Asp Gly Val Val Leu Val Asp
100      105      110
Pro Asp Leu Val Lys Gly Lys Lys Val Tyr Val Thr Leu Thr Cys Ala
115      120      125
Phe Arg Tyr Gly Gln Glu Asp Ile Asp Val Ile Gly Leu Thr Phe Arg
130      135      140
Arg Asp Leu Tyr Phe Ser Arg Val Gln Val Tyr Pro Pro Val Gly Ala
145      150      155      160
Ala Ser Thr Pro Thr Lys Leu Gln Glu Ser Leu Leu Lys Lys Leu Gly
165      170      175
Ser Asn Thr Tyr Pro Phe Leu Leu Thr Phe Pro Asp Tyr Leu Pro Cys
180      185      190
Ser Val Met Leu Gln Pro Ala Pro Gln Asp Ser Gly Lys Ser Cys Gly
195      200      205
Val Asp Phe Glu Val Lys Ala Phe Ala Thr Asp Ser Thr Asp Ala Glu

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210	215	220
Glu Asp Lys Ile Pro Lys Lys Ser Ser Val Arg	Leu Leu Ile Arg Lys	
225	230	235
Val Gln His Ala Pro Leu Glu Met Gly Pro Gln Pro Arg Ala Glu Ala		240
245	250	255
Ala Trp Gln Phe Phe Met Phe Asp Lys Pro Leu His Leu Ala Val Ser		260
260	265	270
Leu Asn Lys Arg Asp Leu Phe Pro Met Gly Ser Pro Ile Pro Val Pro		275
275	280	285
Val Ser Val Pro Asn Asn Thr Glu Lys Pro Val Lys Lys Ile Lys Ala		290
290	295	300
Ser Val Glu Gln Val Ala Asn Val Val Leu Tyr Ser Ser Asp Tyr Tyr		305
305	310	315
Val Lys Pro Val Ala Met Glu Glu Ala Gln Glu Lys Val Pro Pro Asn		320
325	330	335
Ser Thr Trp Thr Lys Ala Leu Thr Leu Leu Pro Trp Leu Val Asn Asn		340
340	345	350
Arg Glu Arg Arg Gly Ile Ala Leu Asp Gly Lys Ile Lys His Glu Asp		355
355	360	365
Thr Asn Leu Ala Ser Ser Thr Ile Ile Lys Glu Gly Ile Asp Arg Lys		370
370	375	380
Arg Ser Trp Glu Ile Leu Val Ser Tyr Pro Asp Gln Arg Xaa Ser Ser		385
385	390	395
Thr Val Ser Gly Phe Leu Gly Arg Ala Ser Pro Ser Gln Xaa Ser Arg		400
405	410	415
Pro Thr Xaa Arg Ser Gln Phe Arg Leu Met His Pro Gln Pro Glu Asp		420
420	425	430
Pro Ala Lys Glu Ser Tyr Gln Asp Ala Asn Leu Val Phe Glu Glu Phe		435
435	440	445
Ala Arg Pro Xaa Ile Leu Lys Asp Ala Gly Glu Ala Xaa Glu Gly Lys		450
450	455	460
Arg Asp Gln Glu		
465	468	

<210> 3394

<211> 460

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(459)

<223> Xaa = any amino acid or nothing

<400> 3394

Arg Pro Pro Thr Met Ala Ala Asp Gln Arg Pro Lys Ala Asp Thr Leu	
1	5
Ala Leu Arg Gln Arg Leu Ile Ser Ser Ser Cys Arg Leu Phe Phe Pro	10
20	25
Glu Asp Pro Val Lys Ile Val Arg Ala Gln Gly Gln Tyr Met Tyr Asp	30
35	40
Glu Gln Gly Ala Glu Tyr Ile Asp Cys Ile Ser Asn Val Ala His Val	45
50	55
Gly His Cys His Pro Leu Val Val Gln Ala Ala His Glu Gln Asn Gln	60
65	70
Val Leu Asn Thr Asn Ser Arg Tyr Leu His Asp Asn Ile Val Asp Tyr	75
85	90
Ala Gln Arg Leu Ser Glu Thr Leu Pro Glu Gln Leu Cys Val Phe Tyr	95
100	105
Phe Leu Asn Ser Gly Ser Glu Ala Asn Asp Leu Ala Leu Arg Leu Ala	110
115	120
Arg His Tyr Thr Gly His Gln Asp Val Val Val Leu Asp His Ala Tyr	125

130	135	140
His Gly His Leu Ser Ser Leu Ile Asp Ile Ser Pro Tyr Lys Phe Arg		
145	150	155
Asn Leu Asp Gly Gln Lys Glu Trp Val His Val Ala Pro Leu Pro Asp		160
	165	170
Thr Tyr Arg Gly Pro Tyr Arg Glu Asp His Pro Thr His Val Glu Asp		175
	180	185
Gly Leu Glu Lys Ala Phe Ser Xaa Lys Arg Val Val Gln Gly Arg Asn		190
	195	200
Arg Gln Ile Cys Arg Arg Gln Ile Ala Ala Phe Phe Ala Glu Ser Leu		205
	210	215
Pro Ser Val Gly Gly Gln Ile Ile Pro Pro Ala Gly Tyr Phe Ser Gln		220
	225	230
Val Ala Glu His Ile Arg Lys Ala Gly Gly Val Phe Val Ala Asp Glu		235
	245	250
Ile Gln Val Gly Phe Gly Arg Val Gly Lys His Phe Trp Ala Phe Gln		255
	260	265
Leu Gln Gly Lys Asp Phe Val Pro Asp Ile Val Thr Met Gly Lys Ser		270
	275	280
Ile Gly Asn Gly His Pro Val Ala Cys Val Ala Ala Thr Gln Pro Val		285
	290	295
Ala Arg Ala Phe Glu Ala Thr Gly Val Glu Tyr Phe Asn Thr Phe Gly		300
	305	310
Gly Ser Pro Val Ser Cys Ala Val Gly Leu Ala Val Leu Asn Val Leu		315
	325	330
Glu Lys Glu Gln Leu Gln Asp His Ala Thr Ser Val Gly Ser Phe Leu		335
	340	345
Met Gln Leu Leu Gly Gln Gln Lys Ile Lys His Pro Ile Val Gly Asp		350
	355	360
Val Arg Gly Val Gly Leu Phe Ile Gly Val Asp Leu Ile Lys Asp Glu		365
	370	375
Ala Thr Arg Thr Pro Ala Thr Glu Glu Ala Ala Tyr Leu Val Ser Arg		380
	385	390
Leu Lys Glu Asn Tyr Val Leu Leu Ser Thr Asp Gly Pro Gly Arg Asn		395
	405	410
Ile Leu Lys Phe Lys Pro Pro Met Cys Phe Ser Leu Asp Asn Ala Arg		415
	420	425
Gln Val Val Ala Lys Leu Asp Ala Ile Leu Thr Asp Met Glu Glu Lys		430
	435	440
Val Arg Ser Cys Glu Thr Leu Arg Leu Gln Pro		445
	450	455
		459

<210> 3395

<211> 475

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(474)

<223> Xaa = any amino acid or nothing

<400> 3395

Phe Arg Asp Gly Phe Ser Leu Arg Cys Gly Cys Asn Ala Glu Leu Pro		
1	5	10
Gly Arg Gly Gly Asp Asp Ala Ala Asp Arg Ala Ile Gln Arg Phe Leu		15
	20	25
Arg Thr Gly Ala Ala Val Arg Tyr Lys Val Met Lys Asn Trp Gly Val		30
	35	40
Ile Gly Gly Ile Ala Ala Ala Leu Ala Ala Gly Ile Tyr Val Ile Trp		45
	50	55
Gly Pro Ile Thr Glu Arg Lys Lys Arg Arg Lys Gly Leu Val Pro Gly		60

65					70					75				80	
Leu	Val	Asn	Leu	Gly	Asn	Thr	Cys	Phe	Met	Asn	Ser	Leu	Leu	Gln	Gly
				85					90					95	
Leu	Ser	Ala	Cys	Pro	Ala	Phe	Ile	Arg	Trp	Leu	Glu	Glu	Phe	Thr	Ser
			100					105					110		
Gln	Tyr	Ser	Arg	Asp	Gln	Lys	Glu	Pro	Pro	Ser	His	Gln	Tyr	Leu	Ser
		115					120					125			
Leu	Thr	Leu	Leu	His	Leu	Leu	Lys	Ala	Leu	Ser	Cys	Gln	Glu	Val	Thr
		130					135				140				
Asp	Asp	Glu	Val	Leu	His	Ala	Ser	Cys	Leu	Leu	Asp	Val	Leu	Arg	Met
		145			150					155				160	
Tyr	Arg	Trp	Gln	Ile	Ser	Ser	Phe	Glu	Glu	Gln	Asp	Ala	His	Glu	Leu
			165					170					175		
Phe	His	Val	Ile	Thr	Ser	Ser	Leu	Glu	Asp	Glu	Arg	Asp	Arg	Gln	Pro
		180						185					190		
Arg	Val	Thr	His	Leu	Phe	Asp	Val	His	Ser	Leu	Glu	His	Ser	Gln	Lys
		195					200					205			
Xaa	Leu	Pro	Lys	Gln	Ile	Thr	Cys	Arg	Thr	Arg	Gly	Ser	Pro	His	Pro
		210				215					220				
Thr	Ser	Asn	His	Trp	Lys	Ser	Gln	His	Pro	Phe	His	Gly	Arg	Leu	Thr
		225			230					235				240	
Ser	Asn	Met	Val	Cys	Lys	His	Cys	Glu	His	Gln	Ser	Pro	Val	Arg	Phe
			245					250					255		
Asp	Thr	Phe	Asp	Ser	Leu	Ser	Leu	Ser	Ile	Pro	Ala	Ala	Thr	Trp	Gly
		260					265						270		
His	Pro	Leu	Thr	Leu	Asp	His	Cys	Leu	His	His	Phe	Ile	Ser	Ser	Glu
		275					280					285			
Ser	Val	Arg	Asp	Val	Val	Cys	Asp	Asn	Cys	Thr	Lys	Ile	Glu	Ala	Lys
		290				295					300				
Gly	Thr	Leu	Asn	Gly	Glu	Lys	Val	Glu	His	Gln	Arg	Thr	Thr	Phe	Val
		305			310					315				320	
Lys	Gln	Leu	Lys	Leu	Gly	Lys	Leu	Pro	Gln	Cys	Leu	Cys	Ile	His	Leu
			325					330					335		
Gln	Arg	Leu	Ser	Trp	Ser	Ser	His	Gly	Thr	Pro	Leu	Lys	Arg	His	Glu
		340						345					350		
His	Val	Gln	Phe	Asn	Glu	Phe	Leu	Met	Met	Asp	Ile	Tyr	Lys	Tyr	His
		355					360					365			
Leu	Leu	Gly	His	Lys	Pro	Ser	Gln	His	Asn	Pro	Lys	Leu	Asn	Lys	Asn
		370				375					380				
Pro	Gly	Pro	Thr	Leu	Glu	Leu	Gln	Asp	Gly	Pro	Gly	Ala	Pro	Thr	Pro
		385			390					395				400	
Gly	Leu	Asn	Gln	Pro	Gly	Ala	Pro	Lys	Thr	Gln	Ile	Phe	Met	Asn	Gly
			405					410					415		
Ala	Cys	Ser	Pro	Ser	Leu	Leu	Pro	Thr	Leu	Ser	Ala	Pro	Met	Pro	Phe
		420						425					430		
Pro	Leu	Pro	Val	Val	Pro	Asp	Tyr	Ser	Ser	Ser	Thr	Tyr	Leu	Phe	Arg
		435					440					445			
Leu	Met	Gly	Ser	Cys	Arg	Pro	Pro	Trp	Glu	Thr	Trp	His	Ser	Gly	Thr
		450				455					460				
Leu	Cys	Ser	Phe	Thr	Asp	Gly	Pro	His	Leu						
		465				470			474						

<210> 3396

<211> 579

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(570)

<223> Xaa = any amino acid or nothing

<400> 3396

Thr	Gln	Glu	Ala	Gly	Leu	Ile	Phe	Phe	Ser	Pro	Pro	Phe	Ser	Leu	Ser
1				5					10					15	
Leu	Ser	Leu	Ser	Leu	Pro	Leu	Ser	Leu	Phe	Leu	Leu	Ser	His	Pro	His
			20					25					30		
Ser	Arg	Thr	Pro	Pro	Asn	Arg	Thr	Pro	Arg	Arg	Thr	Arg	Ile	Pro	Gln
		35					40					45			
Arg	Pro	Ala	Val	Met	Tyr	Ser	Pro	Leu	Cys	Leu	Thr	Gln	Asp	Glu	Phe
		50				55					60				
His	Pro	Phe	Ile	Glu	Ala	Leu	Leu	Pro	His	Val	Arg	Ala	Phe	Ala	Tyr
	65				70					75					80
Thr	Trp	Phe	Asn	Leu	Gln	Ala	Arg	Lys	Arg	Lys	Tyr	Phe	Lys	Lys	His
			85						90					95	
Glu	Lys	Arg	Met	Ser	Lys	Glu	Glu	Glu	Arg	Ala	Val	Lys	Asp	Glu	Leu
			100					105					110		
Leu	Ser	Glu	Lys	Pro	Glu	Val	Lys	Gln	Lys	Trp	Ala	Ser	Arg	Leu	Leu
		115					120					125			
Ala	Lys	Leu	Arg	Lys	Asp	Ile	Arg	Pro	Glu	Tyr	Arg	Glu	Asp	Phe	Val
	130					135					140				
Leu	Thr	Val	Thr	Gly	Lys	Lys	Pro	Pro	Cys	Cys	Val	Leu	Ser	Asn	Pro
145					150					155					160
Asp	Gln	Lys	Gly	Lys	Met	Arg	Arg	Ile	Asp	Cys	Leu	Arg	Gln	Ala	Asp
				165					170					175	
Lys	Val	Trp	Arg	Leu	Asp	Leu	Val	Met	Val	Ile	Leu	Phe	Lys	Gly	Ile
		180						185					190		
Pro	Leu	Glu	Ser	Thr	Asp	Gly	Glu	Arg	Leu	Val	Lys	Ser	Pro	Gln	Cys
		195					200						205		
Ser	Asn	Pro	Gly	Leu	Cys	Val	Gln	Pro	His	His	Ile	Gly	Val	Ser	Val
	210					215					220				
Lys	Glu	Leu	Asp	Leu	Tyr	Leu	Ala	Tyr	Phe	Val	His	Ala	Ala	Asp	Ser
225					230					235					240
Ser	Gln	Ser	Glu	Ser	Pro	Ser	Gln	Ala	Lys	Xaa	Arg	Xaa	His	Xaa	Gly
				245					250					255	
Pro	Ala	Arg	Lys	Trp	Asp	Ile	Trp	Gly	Phe	Gln	Asp	Ser	Phe	Val	Thr
			260					265					270		
Ser	Gly	Val	Phe	Ser	Val	Thr	Xaa	Ala	Xaa	Leu	Arg	Val	Ser	Gln	Thr
		275					280					285			
Pro	Ile	Ala	Ala	Gly	Thr	Gly	Pro	Asn	Phe	Ser	Leu	Ser	Asp	Leu	Glu
	290					295					300				
Ser	Ser	Ser	Tyr	Tyr	Ser	Met	Ser	Pro	Gly	Ala	Met	Arg	Arg	Ser	Leu
305					310					315					320
Pro	Ser	Thr	Ser	Ser	Thr	Ser	Ser	Thr	Lys	Arg	Leu	Lys	Ser	Val	Glu
				325					330					335	
Asp	Glu	Met	Asp	Ser	Pro	Gly	Glu	Glu	Pro	Phe	Tyr	Thr	Gly	Gln	Gly
		340						345					350		
Arg	Ser	Pro	Gly	Ser	Gly	Ser	Gln	Ser	Ser	Gly	Trp	His	Glu	Val	Glu
		355					360					365			
Pro	Gly	Met	Pro	Ser	Pro	Thr	Thr	Leu	Lys	Lys	Ser	Glu	Lys	Ser	Gly
	370					375					380				
Phe	Ser	Ser	Pro	Ser	Pro	Ser	Gln	Thr	Ser	Ser	Leu	Gly	Thr	Ala	Phe
385					390					395					400
Thr	Gln	His	His	Arg	Pro	Val	Ile	Thr	Gly	Thr	Gln	Ser	Lys	Phe	His
				405					410					415	
Ile	Ala	Thr	Pro	Ser	Ile	Leu	His	Phe	Pro	Arg	His	Ser	Pro	Phe	Phe
			420					425					430		
Gln	Gln	Pro	Gly	Pro	Tyr	Phe	Ser	His	Pro	Ala	Ile	Arg	Tyr	His	Pro
		435					440					445			
Gln	Glu	Thr	Leu	Lys	Glu	Phe	Val	Gln	Leu	Val	Cys	Pro	Asp	Ala	Gly
	450					455					460				
Gln	Gln	Ala	Gly	Gln	Pro	Asn	Gly	Ser	Ser	Gln	Gly	Lys	Val	His	Asn
465					470					475					480
Pro	Phe	Leu	Pro	Thr	Pro	Met	Leu	Pro	Pro	Pro	Pro	Pro	Pro	Pro	Met
				485					490					495	
Ala	Arg	Pro	Val	Pro	Leu	Pro	Val	Pro	Asp	Thr	Lys	Pro	Pro	Thr	Thr

500					505					510					
Ser	Thr	Glu	Gly	Gly	Ala	Ala	Ser	Pro	Thr	Ser	Pro	Thr	Thr	Arg	Ser
515					520					525					
Pro	Gly	Arg	Thr	Arg	Pro	Gln	Gln	Pro	Phe	Leu	Ser	Tyr	Gly	Pro	Pro
530					535					540					
Xaa	Pro	Ser	Asn	Ala	Leu	Ile	Gly	Gly	Gly	Gly	Gly	Gly	Ala	Gly	Glu
545					550					555					
Arg	Ala	Gly	Glu	Arg	Ala	Asp	Leu	Glu	Met						
565					570										

<210> 3397

<211> 668

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(666)

<223> Xaa = any amino acid or nothing

<400> 3397

Thr	Gly	Thr	Leu	Thr	Glu	Asp	Gly	Leu	Asp	Val	Met	Gly	Val	Val	Pro
1				5					10					15	
Leu	Lys	Gly	Gln	Ala	Phe	Leu	Pro	Leu	Val	Pro	Glu	Pro	Arg	Arg	Leu
			20					25					30		
Pro	Val	Gly	Pro	Leu	Leu	Arg	Ala	Leu	Ala	Thr	Cys	His	Ala	Leu	Ser
			35				40					45			
Arg	Leu	Gln	Asp	Thr	Pro	Val	Gly	Asp	Pro	Met	Asp	Leu	Lys	Met	Val
			50			55					60				
Glu	Ser	Thr	Gly	Trp	Val	Leu	Glu	Glu	Glu	Pro	Ala	Ala	Asp	Ser	Ala
			65		70					75					80
Phe	Gly	Thr	Gln	Val	Leu	Ala	Val	Met	Arg	Pro	Pro	Leu	Trp	Glu	Pro
			85					90						95	
Gln	Leu	Gln	Ala	Met	Glu	Glu	Pro	Pro	Val	Pro	Val	Ser	Val	Leu	His
			100				105						110		
Arg	Phe	Pro	Phe	Ser	Ser	Ala	Leu	Gln	Arg	Met	Ser	Val	Val	Val	Ala
			115				120					125			
Trp	Pro	Gly	Ala	Thr	Gln	Pro	Glu	Ala	Tyr	Val	Lys	Gly	Ser	Pro	Glu
			130			135					140				
Leu	Val	Ala	Gly	Leu	Cys	Asn	Pro	Glu	Thr	Val	Pro	Thr	Asp	Phe	Ala
			145			150				155					160
Gln	Met	Leu	Gln	Ser	Tyr	Thr	Ala	Ala	Gly	Tyr	Arg	Val	Val	Ala	Leu
				165					170					175	
Ala	Ser	Lys	Pro	Leu	Pro	Ser	Val	Pro	Ser	Leu	Glu	Ala	Ala	Gln	Gln
			180					185					190		
Leu	Thr	Arg	Asp	Thr	Val	Glu	Gly	Asp	Leu	Ser	Leu	Leu	Gly	Leu	Leu
			195				200					205			
Val	Met	Arg	Asn	Leu	Leu	Lys	Pro	Gln	Thr	Thr	Pro	Val	Ile	Gln	Ala
			210			215					220				
Leu	Arg	Arg	Thr	Arg	Ile	Arg	Ala	Val	Met	Val	Thr	Gly	Asp	Asn	Leu
			225			230				235					240
Gln	Thr	Ala	Val	Thr	Val	Ala	Arg	Gly	Cys	Gly	Met	Val	Ala	Pro	Gln
				245					250					255	
Glu	His	Leu	Ile	Ile	Val	His	Ala	Thr	His	Pro	Glu	Arg	Gly	Gln	Pro
			260				265						270		
Ala	Ser	Leu	Glu	Phe	Leu	Pro	Met	Glu	Ser	Pro	Thr	Ala	Val	Asn	Gly
			275				280					285			
Val	Lys	Asp	Pro	Asp	Gln	Ala	Ala	Ser	Tyr	Thr	Val	Glu	Pro	Asp	Pro
			290			295					300				
Arg	Ser	Arg	His	Leu	Ala	Leu	Ser	Gly	Pro	Thr	Phe	Gly	Ile	Ile	Val
				310						315					320
Lys	His	Phe	Pro	Lys	Leu	Leu	Pro	Lys	Val	Leu	Val	Gln	Gly	Thr	Val

```

      325      330      335
Phe Ala Arg Met Ala Pro Glu Gln Lys Thr Glu Leu Val Cys Glu Leu
      340      345      350
Gln Lys Leu Gln Tyr Cys Val Gly Met Cys Gly Asp Gly Ala Asn Asp
      355      360      365
Cys Gly Ala Leu Lys Ala Ala Asp Val Gly Ile Ser Leu Ser Gln Ala
      370      375      380
Glu Ala Ser Val Val Ser Pro Phe Thr Ser Ser Met Ala Ser Ile Glu
385      390      395      400
Cys Val Pro Met Val Ile Arg Glu Gly Arg Cys Ser Leu Asp Thr Ser
      405      410      415
Phe Ser Val Phe Lys Tyr Met Ala Leu Tyr Ser Leu Thr Gln Phe Ile
      420      425      430
Ser Val Leu Ile Leu Tyr Thr Ile Asn Thr Asn Leu Gly Asp Leu Gln
      435      440      445
Phe Leu Ala Ile Asp Leu Val Ile Thr Thr Thr Val Ala Val Leu Met
450      455      460
Ser Arg Thr Gly Pro Ala Leu Val Leu Gly Arg Val Arg Pro Pro Gly
465      470      475      480
Ala Leu Leu Ser Val Pro Val Leu Ser Ser Leu Leu Leu Gln Met Val
      485      490      495
Leu Val Thr Gly Val Gln Leu Gly Gly Tyr Phe Leu Thr Leu Ala Gln
      500      505      510
Pro Trp Phe Val Pro Leu Asn Arg Thr Val Ala Ala Pro Asp Asn Leu
      515      520      525
Pro Asn Tyr Glu Asn Thr Val Val Phe Ser Leu Ser Ser Phe Gln Tyr
530      535      540
Leu Ile Leu Ala Ala Ala Val Ser Lys Gly Ala Pro Phe Arg Arg Pro
545      550      555      560
Leu Thr Asn Asn Val Pro Phe Leu Leu Ala Ser Ala Leu Xaa Ser Ser
      565      570      575
Val Leu Val Val Leu Val Leu Ser Pro Gly Leu Leu His Gly Pro Leu
      580      585      590
Ala Leu Arg Asn Ile Thr Asp Thr Gly Phe Lys Leu Leu Leu Val Gly
      595      600      605
Leu Val Thr Leu Asn Phe Val Gly Gly Leu His Ala Gly Glu Arg Ala
610      615      620
Arg Pro Val Pro Pro Arg Leu Pro Ala Pro Pro Pro Ala Gln Ala Gly
625      630      635      640
Ser Lys Lys Arg Phe Lys Gln Leu Glu Arg Glu Leu Ala Glu Gln Pro
      645      650      655
Trp Pro Pro Leu Pro Ala Gly Pro Leu Arg
      660      665      666

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<210> 3398

<211> 207

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(204)

<223> Xaa = any amino acid or nothing

<400> 3398

```

Phe Pro Phe Arg Met Leu Thr Gly Tyr Leu Tyr Leu Met Trp Arg Arg
  1           5           10           15
Lys Ala Phe Trp Ser Gly Thr Gln Arg His Pro Leu Pro Gly Gly Leu
      20           25           30
Lys Arg Arg Arg Arg Pro Gly Arg Gly Pro Trp Pro Ala Pro Gly Gly
      35           40           45
Gln Gly Val Gly Pro Ser Ala Leu Xaa Lys Ala Gly Ser Pro Pro Ala

```

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      50      55      60
Asn Arg Pro Gly Gln Gly Glu Pro Gly Leu Ile Ser Pro Lys Pro Val
 65      70      75      80
Thr Glu Val Leu Pro Asp Val Gln Gly Ala Pro Val Pro Val Pro Pro
      85      90      95
Leu Pro Thr Pro Pro Ser Leu Pro His Leu Gln Asn Gln Pro Pro Thr
      100      105      110
Val Gln His Tyr Leu Leu Ser Phe Ser Trp Lys Pro Ser Gln Gly Pro
      115      120      125
Glu Xaa Arg Ala Xaa Pro Ser Pro Leu Pro Pro Ala Ala Met Arg Pro
      130      135      140
Asp Gly Xaa Pro Gly Pro Ala Ser Gln Gly Pro Asp Gln Pro Gly Pro
145      150      155      160
Cys Pro Pro Ala Ser Leu Pro Thr Ser Pro Pro Gly Lys Gly Phe Gln
      165      170      175
Lys Thr Glu Thr Arg Lys His Pro Pro Pro Arg Gln Gln His Lys Pro
      180      185      190
Lys Cys Thr Ala Asn Arg Pro Leu Ala Ser Phe Leu
      195      200      204

```

<210> 3399

<211> 62

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(62)

<223> Xaa = any amino acid or nothing

<400> 3399

```

His His His His His His His His His His His His His Leu Val Ala
 1      5      10      15
Phe Gly Lys Val Gln Xaa Leu Gln Asn Ser Pro Ser Ser Ser Ser Ser
      20      25      30
Ser Ser Ser Gly Cys Phe Trp Gln Ala Arg Phe Ser Ser Tyr Arg Thr
      35      40      45
Leu His His His His His His His His His His His His His
      50      55      60      62

```

<210> 3400

<211> 509

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(501)

<223> Xaa = any amino acid or nothing

<400> 3400

```

Pro Phe Leu Ser Val His Arg Ser Pro His Gly Pro Ser Lys Leu Cys
 1      5      10      15
Asp Asp Pro Gln Ala Ser Leu Val Pro Glu Pro Val Pro Gly Gly Cys
      20      25      30
Gln Glu Pro Glu Glu Met Ser Trp Pro Pro Ser Gly Glu Ile Ala Ser
      35      40      45
Pro Pro Glu Leu Pro Ser Ser Pro Pro Pro Gly Leu Pro Glu Val Ala
      50      55      60
Pro Asp Ala Thr Ser Thr Gly Leu Pro Asp Thr Pro Ala Ala Pro Glu

```


65					70					75				80	
Thr	Ser	Thr	Asn	Tyr	Pro	Val	Glu	Cys	Thr	Glu	Gly	Ser	Ala	Gly	Pro
			85						90					95	
Gln	Ser	Leu	Pro	Leu	Pro	Ile	Leu	Glu	Pro	Val	Lys	Asn	Pro	Cys	Ser
			100						105					110	
Val	Lys	Asp	Gln	Thr	Pro	Leu	Gln	Leu	Ser	Val	Glu	Asp	Thr	Thr	Ser
		115					120					125			
Pro	Asn	Thr	Lys	Pro	Cys	Pro	Pro	Thr	Pro	Thr	Thr	Pro	Glu	Thr	Ser
		130					135					140			
Pro	Pro	Pro	Pro	Pro	Pro	Pro	Pro	Ser	Ser	Thr	Pro	Cys	Ser	Ala	His
145							150				155				160
Leu	Thr	Pro	Ser	Ser	Leu	Phe	Pro	Ser	Ser	Leu	Glu	Ser	Ser	Ser	Glu
			165						170					175	
Gln	Lys	Phe	Tyr	Asn	Phe	Val	Ile	Leu	His	Ala	Arg	Ala	Asp	Glu	His
			180						185				190		
Ile	Ala	Leu	Arg	Val	Ser	Gly	Arg	Ser	Trp	Glu	Ala	Leu	Gly	Val	Pro
		195					200					205			
Asp	Gly	Ala	Thr	Phe	Cys	Glu	Asp	Phe	Gln	Val	Pro	Gly	Arg	Gly	Glu
		210					215				220				
Leu	Ser	Cys	Leu	Gln	Asp	Ala	Ile	Asp	His	Ser	Ala	Phe	Ile	Ile	Leu
225					230					235					240
Leu	Leu	Thr	Ser	Asn	Phe	Asp	Cys	Arg	Leu	Ser	Leu	His	Gln	Val	Asn
			245						250					255	
Gln	Ala	Met	Met	Ser	Asn	Leu	Thr	Arg	Gln	Gly	Ser	Gln	Asp	Cys	Val
		260						265					270		
Ile	Pro	Phe	Leu	Pro	Leu	Glu	Ser	Ser	Pro	Ala	Arg	Leu	Ser	Ser	Asp
		275					280					285			
Thr	Ala	Ser	Leu	Leu	Ser	Gly	Leu	Val	Arg	Leu	Asp	Glu	His	Ser	Gln
		290					295					300			
Ile	Phe	Ala	Arg	Lys	Val	Ala	Asn	Thr	Phe	Lys	Pro	His	Arg	Leu	Gln
305					310					315					320
Ala	Arg	Lys	Ala	Met	Trp	Arg	Lys	Glu	Gln	Asp	Thr	Arg	Ala	Leu	Arg
			325						330					335	
Glu	Gln	Ser	Gln	His	Leu	Asp	Gly	Glu	Arg	Met	Gln	Ala	Ala	Ala	Leu
		340						345				350			
Asn	Ala	Ala	Tyr	Ser	Ala	Tyr	Leu	Gln	Ser	Tyr	Leu	Ser	Tyr	Gln	Ala
		355					360					365			
Gln	Met	Glu	Gln	Leu	Gln	Val	Ala	Phe	Gly	Ser	His	Met	Ser	Phe	Gly
		370				375					380				
Thr	Gly	Ala	Pro	Tyr	Gly	Ala	Arg	Met	Pro	Phe	Gly	Gly	Gln	Val	Pro
385					390					395					400
Leu	Gly	Ala	Pro	Pro	Pro	Phe	Pro	Thr	Trp	Pro	Gly	Cys	Pro	Gln	Pro
			405						410					415	
Pro	Pro	Leu	His	Ala	Trp	Gln	Ala	Gly	Thr	Pro	Pro	Pro	Pro	Ser	Pro
		420						425					430		
Gln	Pro	Ala	Ala	Phe	Pro	Gln	Ser	Leu	Pro	Phe	Pro	Ala	Val	Pro	Lys
		435						440				445			
Pro	Phe	Pro	Thr	Ala	Ser	Thr	Ala	Pro	Pro	Ser	Glu	Pro	Lys	Gly	Trp
		450					455				460				
Gln	Pro	Leu	Ile	Ile	His	His	Ala	Gln	Met	Val	Thr	Ser	Trp	Gly	Xaa
465					470					475					480
Asn	Lys	His	Met	Trp	Asn	Gln	Arg	Gly	Ser	Gln	Ala	Pro	Glu	Asp	Lys
			485						490					495	
Thr	Gln	Glu	Ala	Glu											
			500	501											

<210> 3401

<211> 413

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(411)

<223> Xaa = any amino acid or nothing

<400> 3401

Glu Trp Gly Trp Leu Gly Ala Ala Gln Pro Pro Glu Glu Glu Ala Glu
 1 5 10 15
 Ala Glu Asp Gln Glu Ser Pro Ser Ser Leu Cys Arg Glu Ala Leu Ala
 20 25 30
 Glu Ile Lys Lys Glu Ile Ser Pro Leu Phe Ile Gly Met Glu Lys Cys
 35 40 45
 Ser Val Gly Gly Leu Glu Leu Thr Glu Gln Thr Pro Ala Leu Leu Gly
 50 55 60
 Asn Met Ala Met Ala Thr Ser Leu Met Asp Ile Gly Asp Ser Phe Gly
 65 70 75 80
 His Pro Ala Cys Pro Leu Val Ser Arg Ser Arg Asn Ser Pro Val Glu
 85 90 95
 Asp Asp Asp Asp Asp Asp Val Val Phe Ile Glu Ser Ile Gln Pro
 100 105 110
 Pro Ser Ile Ser Ala Pro Ala Ile Ala Asp Gln Arg Asn Phe Ile Phe
 115 120 125
 Ala Ser Ser Lys Asn Glu Lys Pro Gln Gly Asn Tyr Ser Val Ile Pro
 130 135 140
 Pro Ser Ser Arg Asp Leu Ala Ser Gln Lys Gly Asn Ile Ser Glu Thr
 145 150 155 160
 Ile Val Ile Asp Asp Glu Glu Asp Ile Glu Thr Asn Gly Gly Ala Glu
 165 170 175
 Lys Lys Ser Ser Cys Phe Ile Glu Trp Gly Leu Pro Gly Thr Lys Asn
 180 185 190
 Lys Thr Asn Asp Leu Asp Phe Ser Thr Ser Ser Leu Ser Arg Ser Lys
 195 200 205
 Val Asn Ala Gly Met Gly Asn Ser Gly Ile Thr Thr Glu Leu Thr Leu
 210 215 220
 Lys Tyr Ile Ile Thr Asn Val Thr Thr Leu Glu Thr Gly Ile Ser Ser
 225 230 235 240
 Val Asn Ala Gly Gln Asp Val Asn Ile Ile Ile Thr Tyr Lys Thr Ser
 245 250 255
 Leu Xaa Asn Thr Asn Leu Gly Asp Val Ala Lys Gly Leu Gln Ser Ser
 260 265 270
 Asn Phe Gly Val Asn Ile Gln Thr Tyr Thr Pro Ser Leu Thr Pro Gln
 275 280 285
 Thr Lys Thr Gly Val Asn Leu Leu Thr Leu Val Glu Xaa Met Trp Gln
 290 295 300
 Glu Thr Tyr Phe Arg Met Glu Asn Leu Gln Leu Ile Ile Cys Pro Glu
 305 310 315 320
 Asp Ala Ser Thr Lys Lys Ala Asn Val Ile Leu Pro Val Glu Ser Ser
 325 330 335
 Lys Ser Phe Gln Glu Phe Tyr Ser Thr Ser Cys Leu Ser Pro Cys Glu
 340 345 350
 Asn Asn Trp Asn Leu Lys Lys Gly Val Phe Asn Lys Ser Arg Cys Thr
 355 360 365
 Ile Cys Ser Lys Leu Ala Glu Val Trp Ile Phe Ile Pro Lys Leu Leu
 370 375 380
 Phe Arg Leu Thr Val Ile Ile Leu Thr Phe Lys Cys Tyr Tyr Val Leu
 385 390 395 400
 Phe His Leu His Asn Ala Arg Val Leu Asp Val
 405 410 411

<210> 3402

<211> 413

<212> PRT

<213> Homo sapiens

<221> misc_feature
 <222> (1)...(411)
 <223> Xaa = any amino acid or nothing .

<400> 3402

```

Glu Trp Gly Trp Leu Gly Ala Ala Gln Pro Pro Glu Glu Glu Ala Glu
 1           5           10           15
Ala Glu Asp Gln Glu Ser Pro Ser Ser Leu Cys Arg Glu Ala Leu Ala
          20           25           30
Glu Ile Lys Lys Glu Ile Ser Pro Leu Phe Ile Gly Met Glu Lys Cys
          35           40           45
Ser Val Gly Gly Leu Glu Leu Thr Glu Gln Thr Pro Ala Leu Leu Gly
          50           55           60
Asn Met Ala Met Ala Thr Ser Leu Met Asp Ile Gly Asp Ser Phe Gly
          65           70           75           80
His Pro Ala Cys Pro Leu Val Ser Arg Ser Arg Asn Ser Pro Val Glu
          85           90           95
Asp Asp Asp Asp Asp Asp Val Val Phe Ile Glu Ser Ile Gln Pro
          100          105          110
Pro Ser Ile Ser Ala Pro Ala Ile Ala Asp Gln Arg Asn Phe Ile Phe
          115          120          125
Ala Ser Ser Lys Asn Glu Lys Pro Gln Gly Asn Tyr Ser Val Ile Pro
          130          135          140
Pro Ser Ser Arg Asp Leu Ala Ser Gln Lys Gly Asn Ile Ser Glu Thr
          145          150          155          160
Ile Val Ile Asp Asp Glu Glu Asp Ile Glu Thr Asn Gly Gly Ala Glu
          165          170          175
Lys Lys Ser Ser Cys Phe Ile Glu Trp Gly Leu Pro Gly Thr Lys Asn
          180          185          190
Lys Thr Asn Asp Leu Asp Phe Ser Thr Ser Ser Leu Ser Arg Ser Lys
          195          200          205
Val Asn Ala Gly Met Gly Asn Ser Gly Ile Thr Thr Glu Leu Thr Leu
          210          215          220
Lys Tyr Ile Ile Thr Asn Val Thr Thr Leu Glu Thr Gly Ile Ser Ser
          225          230          235          240
Val Asn Ala Gly Gln Asp Val Asn Ile Ile Ile Thr Tyr Lys Thr Ser
          245          250          255
Leu Xaa Asn Thr Asn Leu Gly Asp Val Ala Lys Gly Leu Gln Ser Ser
          260          265          270
Asn Phe Gly Val Asn Ile Gln Thr Tyr Thr Pro Ser Leu Thr Pro Gln
          275          280          285
Thr Lys Thr Gly Val Asn Leu Leu Thr Leu Val Glu Xaa Met Trp Gln
          290          295          300
Glu Thr Tyr Phe Arg Met Glu Asn Leu Gln Leu Ile Ile Cys Pro Glu
          305          310          315          320
Asp Ala Ser Thr Lys Lys Ala Asn Val Ile Leu Pro Val Glu Ser Ser
          325          330          335
Lys Ser Phe Gln Glu Phe Tyr Ser Thr Ser Cys Leu Ser Pro Cys Glu
          340          345          350
Asn Asn Trp Asn Leu Lys Lys Gly Val Phe Asn Lys Ser Arg Cys Thr
          355          360          365
Ile Cys Ser Lys Leu Ala Glu Val Trp Ile Phe Ile Pro Lys Leu Leu
          370          375          380
Phe Arg Leu Thr Val Ile Ile Leu Thr Phe Lys Cys Tyr Tyr Val Leu
          385          390          395          400
Phe His Leu His Asn Ala Arg Val Leu Asp Val
          405          410 411

```

<210> 3403

<211> 724

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(716)

<223> Xaa = any amino acid or nothing

<400> 3403

```

Ser Arg His Cys Thr Pro Ala Glu Arg Gln Asn Glu Thr His Arg Ala
 1           5           10           15
Pro Asp Phe Ala Met Ser Ala Val Leu Gly His Gln Pro Pro Phe Phe
          20           25           30
Pro Ala Leu Thr Leu Pro Pro Asn Gly Ala Ala Ala Leu Ser Leu Pro
          35           40           45
Gly Ala Leu Ala Lys Pro Ile Met Asp Gln Leu Val Gly Ala Ala Glu
          50           55           60
Thr Gly Ile Pro Phe Ser Ser Leu Gly Pro Gln Ala His Leu Arg Pro
          65           70           75           80
Leu Lys Thr Met Glu Pro Glu Glu Glu Val Glu Asp Asp Pro Lys Val
          85           90           95
His Leu Glu Ala Lys Glu Leu Trp Asp Gln Phe His Lys Arg Gly Thr
          100          105          110
Glu Met Val Ile Thr Lys Ser Gly Arg Arg Met Phe Pro Pro Phe Lys
          115          120          125
Val Arg Cys Ser Gly Leu Asp Lys Lys Ala Lys Tyr Ile Leu Leu Met
          130          135          140
Asp Ile Ile Ala Ala Asp Asp Cys Arg Tyr Lys Phe His Asn Ser Arg
          145          150          155          160
Trp Met Val Ala Gly Lys Ala Asp Pro Glu Met Pro Lys Arg Met Tyr
          165          170          175
Ile His Pro Asp Ser Pro Ala Thr Gly Glu Gln Trp Met Ser Lys Val
          180          185          190
Val Thr Phe His Lys Leu Lys Leu Thr Asn Asn Ile Ser Asp Lys His
          195          200          205
Gly Phe Thr Ile Leu Asn Ser Met His Lys Tyr Gln Pro Arg Phe His
          210          215          220
Ile Val Arg Ala Asn Asp Ile Leu Lys Leu Pro Tyr Ser Thr Phe Arg
          225          230          235          240
Thr Tyr Leu Phe Pro Glu Thr Glu Phe Ile Ala Val Thr Ala Tyr Gln
          245          250          255
Asn Asp Lys Ile Thr Gln Leu Lys Ile Asp Asn Asn Pro Phe Ala Lys
          260          265          270
Gly Phe Arg Asp Thr Gly Asn Gly Arg Arg Glu Lys Arg Lys Gln Leu
          275          280          285
Thr Leu Gln Ser Met Arg Val Phe Asp Glu Arg His Lys Lys Glu Asn
          290          295          300
Gly Thr Ser Asp Glu Ser Ser Ser Glu Gln Ala Ala Phe Asn Cys Phe
          305          310          315          320
Ala Gln Ala Ser Ser Pro Ala Ala Pro Leu Xaa Arg Thr Ser Asn Leu
          325          330          335
Lys Asp Phe Ser Pro Ser Arg Gly Xaa Arg Ala Thr Pro Glu Ala Glu
          340          345          350
Glu Gln Arg Gly Ser Thr Ala Pro Arg Pro Ala Thr Arg Ala Lys Ile
          355          360          365
Ser Pro His Pro Arg Arg Arg Ser Pro Ala Val Thr Arg Ala Ala Pro
          370          375          380
Ala Val Lys Ala His Leu Phe Ala Ala Glu Arg Pro Arg Asp Ser Gly
          385          390          395          400
Arg Leu Asp Lys Ala Ser Pro Asp Ser Arg His Ser Pro Ala Thr Ile
          405          410          415
Ser Ser Ser Thr Arg Gly Leu Gly Ala Glu Glu Arg Arg Ser Pro Val
          420          425          430
Arg Glu Gly Gln Ala Pro Ala Lys Val Glu Glu Ala Arg Ala Leu Pro

```

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      435      440      445
Gly Lys Glu Ala Phe Ala Pro Leu Thr Val Gln Thr Asp Ala Ala Ala
  450      455      460
Ala His Leu Ala Gln Gly Pro Leu Pro Gly Leu Gly Phe Ala Pro Gly
  465      470      475      480
Leu Ala Gly Gln Gln Phe Phe Asn Gly His Pro Leu Phe Leu His Pro
      485      490      495
Ser Gln Phe Ala Met Gly Gly Ala Phe Ser Ser Met Ala Ala Ala Gly
      500      505      510
Met Gly Pro Leu Leu Ala Thr Val Ser Gly Ala Ser Thr Gly Val Ser
      515      520      525
Gly Leu Asp Ser Thr Ala Met Ala Ser Ala Ala Ala Ala Gln Gly Leu
      530      535      540
Ser Gly Ala Ser Ala Ala Thr Leu Pro Phe His Leu Gln Gln His Val
  545      550      555      560
Leu Ala Ser Gln Gly Leu Ala Met Ser Pro Phe Gly Ser Leu Phe Pro
      565      570      575
Tyr Pro Tyr Thr Tyr Met Ala Ala Ala Ala Ala Ala Ser Ser Ala Ala
      580      585      590
Ala Ser Ala Ser Val His Arg Thr Pro Phe Asn Leu Asn Thr Met Arg
      595      600      605
Pro Arg Leu Arg Tyr Ser Pro Tyr Ser Ile Pro Val Pro Val Pro Asp
      610      615      620
Gly Ser Ser Leu Leu Thr Thr Ala Leu Pro Ser Met Ala Ala Ala Ala
  625      630      635      640
Gly Pro Leu Asp Gly Lys Ala Ala Ala Leu Ala Ala Ser Pro Ala Ser
      645      650      655
Val Ala Val Asp Ser Gly Ser Glu Leu Asn Ser Arg Ser Ser Thr Leu
      660      665      670
Ser Ser Ser Ser Met Ser Leu Ser Pro Lys Leu Cys Ala Glu Lys Glu
      675      680      685
Ala Ala Thr Ser Glu Leu Gln Ser Ile Gln Arg Leu Val Ser Gly Leu
      690      695      700
Glu Ala Lys Pro Asp Arg Ser Arg Ser Ala Ser Pro
  705      710      715      716

```

<210> 3404

<211> 75

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(74)

<223> Xaa = any amino acid or nothing

<400> 3404

```

Leu Lys Lys Phe Leu Glu Val Pro Gln Ser Tyr Ser Leu Leu Leu Ser
  1      5      10      15
Ser Pro Phe Leu Gln Trp Arg Ala Xaa Arg Pro Gln Asn Ala Ile Gly
      20      25      30
Xaa Gln Phe Ile Ile Lys Thr Leu Val Phe Phe Gly Ile Met Arg Ser
      35      40      45
Ala Gly Asp Val Leu Ser Thr Gln Val Ser Cys Ala Leu Arg Ile Met
      50      55      60
Arg Thr Ala Gly Cys Ser His Ser Ser Pro
  65      70      74

```

<210> 3405

<211> 331

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(330)

<223> Xaa = any amino acid or nothing

<400> 3405

```

Pro Arg Pro Pro Thr Gln Arg Leu Ser Arg Phe Ala Pro Pro Cys Arg
 1           5           10           15
Thr Ala Glu Phe Pro Phe Arg Arg Arg Ala Val Val Thr Arg Pro Ala
           20           25           30
Pro Pro Arg Ala Cys Thr Val Val Gly Arg Ser Ser Pro Val Thr Gly
           35           40           45
Leu Ala Val Gly Ala Ala Val Ala Met Leu Thr Val Ala Ala Arg Ser
           50           55           60
Arg Pro Phe Ala Pro Val Leu Ser Ala Thr Ser Arg Gly Val Ala Gly
65           70           75           80
Ala Leu Thr Pro Xaa Met Gln Ala Thr Val Pro Ala Thr Pro Glu Gln
           85           90           95
Pro Val Leu Asp Leu Lys Arg Pro Phe Leu Ser Arg Glu Ser Leu Ser
           100          105          110
Gly Gln Ala Val Arg Arg Pro Leu Val Ala Ser Val Gly Leu Asn Val
           115          120          125
Pro Ala Ser Val Cys Tyr Ser His Thr Asp Ile Lys Val Pro Asp Phe
130          135          140
Ser Glu Tyr Arg Arg Leu Glu Val Leu Asp Ser Thr Lys Ser Ser Arg
145          150          155          160
Glu Ser Ser Glu Ala Arg Lys Gly Phe Ser Tyr Leu Val Thr Gly Val
           165          170          175
Thr Thr Val Gly Val Ala Tyr Ala Ala Lys Asn Ala Val Thr Gln Phe
           180          185          190
Val Ser Ser Met Ser Ala Ser Ala Asp Val Leu Ala Leu Ala Lys Ile
           195          200          205
Glu Ile Lys Leu Ser Asp Ile Pro Glu Gly Lys Asn Met Ala Phe Lys
210          215          220
Trp Arg Gly Lys Pro Leu Phe Val Arg His Arg Thr Gln Lys Glu Ile
225          230          235          240
Glu Gln Glu Ala Ala Val Glu Leu Ser Gln Leu Arg Asp Pro Gln His
           245          250          255
Asp Leu Asp Arg Val Lys Lys Pro Glu Trp Val Ile Leu Ile Gly Val
           260          265          270
Cys Thr His Leu Gly Cys Val Pro Ile Ala Asn Ala Gly Asp Phe Gly
275          280          285
Gly Tyr Tyr Cys Pro Cys His Gly Ser His Tyr Asp Ala Ser Gly Arg
290          295          300
Ile Arg Leu Gly Pro Ala Pro Leu Asn Leu Glu Val Pro Thr Tyr Glu
305          310          315          320
Phe Thr Ser Asp Asp Met Val Ile Val Gly
           325          330

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<210> 3406

<211> 864

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(863)

<223> Xaa = any amino acid or nothing

<400> 3406

Cys Leu Tyr Pro Asp Phe Cys Arg Ser Val Thr Cys Ala Met Pro Cys
 1 5 10 15
 Phe Thr His Arg Ser Cys Arg Glu Asp Pro Gly Thr Ser Glu Ser Arg
 20 25 30
 Glu Met Asp Pro Val Ala Phe Lys Asp Val Ala Val Asn Phe Thr Gln
 35 40 45
 Glu Glu Trp Ala Leu Leu Asp Ile Ser Gln Lys Asn Leu Tyr Arg Glu
 50 55 60
 Val Met Leu Glu Thr Phe Trp Asn Leu Thr Ser Ile Gly Lys Lys Trp
 65 70 75 80
 Lys Asp Gln Asn Ile Glu Tyr Glu Tyr Gln Asn Pro Arg Arg Asn Phe
 85 90 95
 Arg Ser Val Thr Glu Glu Lys Val Asn Glu Ile Lys Glu Asp Ser His
 100 105 110
 Cys Gly Glu Thr Phe Thr Pro Val Pro Asp Asp Arg Leu Asn Phe Gln
 115 120 125
 Lys Lys Lys Ala Ser Pro Glu Val Lys Ser Cys Asp Ser Phe Val Cys
 130 135 140
 Glu Val Gly Leu Gly Asn Ser Ser Ser Asn Met Asn Ile Arg Gly Asp
 145 150 155 160
 Thr Gly His Lys Ala Cys Glu Cys Gln Glu Tyr Gly Pro Lys Pro Trp
 165 170 175
 Lys Ser Gln Gln Pro Lys Lys Ala Phe Arg Tyr His Pro Ser Leu Arg
 180 185 190
 Thr Gln Glu Arg Asp His Thr Gly Lys Lys Pro Tyr Ala Cys Lys Glu
 195 200 205
 Cys Gly Lys Asn Ile Ile Tyr His Ser Ser Ile Gln Arg His Met Val
 210 215 220
 Val His Ser Gly Asp Gly Pro Tyr Lys Cys Lys Phe Cys Gly Lys Ala
 225 230 235 240
 Phe His Trp Leu Ser Leu Tyr Leu Ile His Glu Arg Thr His Thr Gly
 245 250 255
 Glu Lys Pro Tyr Glu Cys Lys Gln Cys Gly Lys Ser Phe Ser Tyr Ser
 260 265 270
 Ala Thr His Arg Ile His Glu Arg Thr His Ile Gly Glu Lys Pro Tyr
 275 280 285
 Glu Cys Gln Glu Cys Gly Lys Ala Phe His Ser Pro Arg Ser Cys His
 290 295 300
 Arg His Glu Arg Ser His Met Gly Glu Lys Ala Tyr Gln Cys Lys Glu
 305 310 315 320
 Cys Gly Lys Ala Phe Met Cys Pro Arg Tyr Val Arg Arg His Glu Arg
 325 330 335
 Thr His Ser Arg Lys Lys Leu Tyr Glu Cys Lys Gln Cys Gly Lys Ala
 340 345 350
 Leu Ser Ser Leu Thr Ser Phe Gln Thr His Ile Arg Met His Ser Gly
 355 360 365
 Glu Arg Pro Tyr Glu Cys Lys Thr Cys Gly Lys Gly Phe Tyr Ser Ala
 370 375 380
 Lys Ser Phe Gln Arg His Glu Lys Thr His Ser Gly Glu Lys Pro Tyr
 385 390 395 400
 Lys Cys Lys Gln Cys Gly Lys Ala Phe Thr Arg Ser Gly Ser Phe Arg
 405 410 415
 Tyr His Glu Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Gln
 420 425 430
 Cys Gly Lys Ala Phe Arg Ser Ala Pro Asn Leu Gln Ser His Gly Arg
 435 440 445
 Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Ala
 450 455 460
 Phe Ile Phe Val Asn Asn Leu Gln Ser His Glu Arg Thr Gln Thr His
 465 470 475 480
 Ile Arg Ile His Ser Gly Glu Arg Arg Tyr Lys Cys Lys Ile Cys Gly
 485 490 495
 Lys Gly Phe Tyr Cys Pro Lys Ser Phe Gln Arg His Glu Lys Thr His

500										505					510				
Thr	Gly	Glu	Lys	Leu	Tyr	Glu	Cys	Thr	Ala	Thr	Phe	Ser	Ser	Ser	Phe				
515										520					525				
Ser	Ser	Ser	Ser	Ser	Phe	Xaa	Tyr	His	Glu	Arg	Thr	His	Thr	Gly	Glu				
530										535					540				
Lys	Pro	Tyr	Lys	Cys	Glu	Gln	Cys	Gly	Lys	Ala	Phe	Arg	Ala	Val	Ser				
545										550					555				
Ile	Leu	Xaa	Met	His	Gly	Arg	Thr	His	Pro	Glu	Glu	Lys	Pro	Tyr	Glu				
565										570					575				
Cys	Glu	Gln	Xaa	Arg	Lys	Ala	Phe	Arg	Ser	Ala	Pro	His	Leu	Xaa	Ile				
580										585					590				
Arg	Gly	Arg	Thr	His	Asn	Gly	Glu	Lys	Pro	Tyr	Ala	Cys	Lys	Lys	Cys				
595										600					605				
Gly	Lys	Pro	Phe	Gly	Ser	Ala	Gln	Asn	Leu	Arg	Ile	His	Glu	Arg	Thr				
610										615					620				
Gln	Thr	His	Ile	Met	His	Ser	Val	Glu	Arg	Pro	Tyr	Lys	Cys	Lys	Ile				
625										630					635				
Cys	Gly	Arg	Gly	Phe	Tyr	Ser	Ala	Lys	Ser	Phe	Gln	Thr	His	Glu	Lys				
645										650					655				
Ser	Tyr	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Lys	Gln	Cys	Gly	Lys	Ala				
660										665					670				
Phe	Val	Ser	Phe	Thr	Ser	Phe	Arg	Tyr	His	Glu	Arg	Thr	His	Thr	Gly				
675										680					685				
Glu	Asn	Pro	Tyr	Glu	Cys	Lys	Gln	Phe	Gly	Lys	Ala	Phe	Arg	Ser	Val				
690										695					700				
Lys	Asn	Leu	Arg	Phe	His	Lys	Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Cys				
705										710					715				
Glu	Tyr	Met	Lys	Arg	Leu	Thr	Leu	Glu	Gly	Asn	Thr	Met	Asn	Ala	Ser				
725										730					735				
Asn	Val	Ala	Lys	Leu	Ser	Leu	Leu	Pro	Val	Leu	Phe	Asn	Ile	Met	Lys				
740										745					750				
Glu	Phe	Thr	Leu	Gly	Arg	Asn	Pro	Ile	Ser	Val	Ser	Asn	Val	Arg	Lys				
755										760					765				
Pro	Leu	Phe	Leu	Pro	Leu	Leu	Phe	Asn	Ile	Met	Lys	Gly	Leu	Thr	Trp				
770										775					780				
Glu	Arg	Asn	Pro	Met	Ser	Val	Cys	His	Val	Gly	Lys	Pro	Ser	Phe	Leu				
785										790					795				
Leu	Val	Pro	Phe	Asn	Ile	Met	Lys	Gly	Leu	Thr	Leu	Glu	Arg	Ser	Pro				
805										810					815				
Met	Asn	Ile	Ser	Asn	Val	Gly	Lys	Pro	Ser	Asp	Gln	Pro	Arg	Thr	Phe				
820										825					830				
Lys	Cys	Met	Glu	Gly	Leu	Thr	Leu	Glu	Lys	Asn	Pro	Met	Asn	Val	Ser				
835										840					845				
Ser	Met	Gly	Lys	Arg	Ser	Asp	Leu	Thr	Arg	Phe	Phe	Glu	Tyr	Arg					
850										855					860				
															863				

<210> 3407

<211> 477

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(473)

<223> Xaa = any amino acid or nothing

<400> 3407

Pro	Ala	Ala	Pro	Ser	Gly	Ala	Ser	Pro	Gly	Arg	Val	Cys	Gly	Val	Glu
1				5				10					15		
Thr	Ala	Arg	Pro	Leu	Gly	Val	Gln	Arg	Arg	Gln	Ser	Ala	Asp	Glu	Gly
			20				25					30			
Pro	Pro	Gly	Val	Ala	Gly	Leu	Arg	His	Glu	Pro	Pro	Thr	Val	Trp	Leu


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<210> 3408
<211> 1470
<212> PRT
<213> Homo sapiens

<221> misc feature
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<222> (1)...(1469)

<223> Xaa = any amino acid or nothing

<400> 3408

Glu Ala Arg Asp Arg Leu Ala Gln Ser Arg Ala Lys Glu Lys Glu Leu
 1 5 10 15
 Asn Ser Val Ala Ser Glu Leu Ser Ala Arg Gln Glu Glu Ser Glu His
 20 25 30
 Ser His Lys His Leu Ile Glu Leu Arg Arg Glu Phe Lys Lys Asn Val
 35 40 45
 Pro Glu Glu Ile Arg Glu Met Val Ala Pro Val Leu Lys Ser Phe Gln
 50 55 60
 Ala Glu Val Val Ala Leu Ser Lys Arg Ser Gln Glu Ala Glu Ala Ala
 65 70 75 80
 Phe Leu Ser Val Tyr Lys Gln Leu Ile Glu Ala Pro Ala Leu Trp Glu
 85 90 95
 Leu Lys Leu Lys Ser Arg Pro Ala Leu Gly Asp Ser Arg Val Gln Gln
 100 105 110
 Gly Gln His Asp Pro Lys Thr Asp Asn Gln Asn Thr Gln Gln Lys Ala
 115 120 125
 Gly Phe Lys Glu Gly Trp Leu Ala Glu Ala Ser Glu Arg Glu Ala Phe
 130 135 140
 Gly Pro Gly Phe Lys Asp Pro Val Pro Val Phe Glu Ala Ala Arg Ser
 145 150 155 160
 Leu Asp Asp Arg Leu Gln Pro Pro Ser Phe Asp Pro Ser Gly Gln Pro
 165 170 175
 Arg Arg Asp Leu His Thr Ser Trp Lys Arg Asn Pro Glu Leu Leu Ser
 180 185 190
 Pro Lys Ala Leu Lys Ala Thr Gln Ala Glu Leu Leu Glu Leu Arg Arg
 195 200 205
 Lys Tyr Asp Glu Glu Ala Ala Ser Lys Ala Asp Glu Val Gly Leu Ile
 210 215 220
 Met Thr Asn Leu Glu Lys Ala Asn Gln Arg Ala Glu Ala Ala Gln Arg
 225 230 235 240
 Glu Val Glu Ser Leu Arg Glu Gln Leu Ala Ser Val Asn Ser Ser Ile
 245 250 255
 Arg Leu Ala Cys Cys Ser Pro Gln Gly Pro Ser Gly Asp Lys Val Asn
 260 265 270
 Phe Thr Leu Cys Ser Gly Pro Arg Leu Glu Ala Ala Leu Ala Ser Lys
 275 280 285
 Asp Arg Glu Ile Leu Arg Leu Leu Lys Asp Val Gln His Leu Gln Ser
 290 295 300
 Ser Leu Gln Glu Leu Glu Glu Ala Ser Ala Asn Gln Ile Ala Asp Leu
 305 310 315 320
 Glu Arg Gln Leu Thr Ala Lys Ser Glu Ala Ile Glu Lys Leu Glu Glu
 325 330 335
 Lys Leu Gln Ala Gln Ser Asp Tyr Glu Glu Ile Lys Thr Glu Leu Ser
 340 345 350
 Ile Leu Lys Ala Met Lys Leu Ala Ser Ser Thr Cys Ser Leu Pro Gln
 355 360 365
 Gly Met Ala Lys Pro Glu Asp Ser Leu Leu Ile Ala Lys Glu Ala Phe
 370 375 380
 Phe Pro Thr Gln Lys Phe Leu Leu Glu Lys Pro Ser Leu Leu Ala Ser
 385 390 395 400
 Pro Glu Glu Asp Pro Ser Glu Asp Asp Ser Ile Lys Asp Ser Leu Gly
 405 410 415
 Thr Glu Gln Ser Tyr Pro Ser Pro Gln Gln Leu Pro Pro Pro Pro Gly
 420 425 430
 Pro Glu Asp Pro Leu Ser Pro Ser Pro Gly Gln Pro Leu Leu Gly Pro
 435 440 445
 Ser Leu Gly Pro Asp Gly Thr Arg Thr Phe Ser Leu Ser Pro Phe Pro
 450 455 460
 Ser Leu Ala Ser Gly Glu Arg Leu Met Met Pro Pro Ala Ala Phe Lys

465 470 475 480
 Gly Glu Ala Gly Gly Leu Leu Val Phe Pro Pro Ala Phe Tyr Gly Ala
 485 490 495
 Lys Pro Pro Thr Ala Pro Ala Thr Pro Ala Pro Gly Pro Glu Pro Leu
 500 505 510
 Gly Gly Pro Glu Pro Ala Asp Gly Gly Gly Gly Ala Ala Gly Pro
 515 520 525
 Gly Ala Glu Glu Glu Gln Leu Asp Thr Ala Glu Ile Ala Phe Gln Val
 530 535 540
 Lys Glu Gln Leu Leu Lys His Asn Ile Gly Gln Arg Val Phe Gly His
 545 550 555 560
 Tyr Val Leu Gly Leu Ser Gln Gly Ser Val Ser Glu Ile Leu Ala Arg
 565 570 575
 Pro Lys Pro Trp Arg Lys Leu His Gly Xaa Xaa Gly Lys Glu Pro Phe
 580 585 590
 Ile Lys Met Lys Gln Phe Leu Ser Asp Glu Gln Asn Val Leu Ala Leu
 595 600 605
 Arg Thr Ile Gln Val Arg Gln Arg Gly Ser Ile Thr Pro Arg Ile Arg
 610 615 620
 Thr Pro Glu Thr Gly Ser Asp Asp Ala Ile Lys Ser Ile Leu Glu Gln
 625 630 635 640
 Ala Lys Lys Glu Ile Glu Ser Gln Lys Gly Gly Glu Pro Lys Thr Ser
 645 650 655
 Val Ala Pro Leu Ser Ile Ala Asn Gly Thr Thr Pro Ala Ser Thr Ser
 660 665 670
 Glu Asp Ala Ile Lys Ser Ile Leu Glu Gln Ala Arg Arg Glu Met Gln
 675 680 685
 Ala Gln Gln Gln Ala Leu Leu Glu Met Glu Val Ala Pro Arg Gly Arg
 690 695 700
 Ser Val Pro Pro Ser Pro Pro Glu Arg Pro Ser Leu Ala Thr Ala Ser
 705 710 715 720
 Gln Asn Gly Ala Pro Ala Leu Val Lys Gln Glu Glu Gly Ser Gly Gly
 725 730 735
 Pro Ala Gln Ala Pro Leu Pro Val Leu Ser Pro Ala Ala Phe Val Gln
 740 745 750
 Ser Ile Ile Arg Lys Val Lys Ser Glu Ile Gly Asp Ala Gly Tyr Phe
 755 760 765
 Asp His His Trp Ala Ser Asp Arg Gly Leu Leu Ser Arg Pro Tyr Ala
 770 775 780
 Ser Val Ser Pro Ser Leu Ser Ser Ser Ser Ser Gly Tyr Ser Gly
 785 790 795 800
 Gln Pro Asn Gly Arg Ala Trp Pro Arg Gly Asp Glu Ala Pro Val Pro
 805 810 815
 Pro Glu Asp Glu Ala Ala Ala Gly Ala Glu Asp Glu Pro Pro Arg Thr
 820 825 830
 Gly Glu Leu Lys Ala Glu Gly Ala Thr Ala Glu Ala Gly Ala Arg Leu
 835 840 845
 Pro Tyr Tyr Pro Ala Tyr Val Pro Arg Thr Leu Lys Pro Thr Val Pro
 850 855 860
 Pro Leu Thr Pro Glu Gln Tyr Glu Leu Tyr Met Tyr Arg Glu Val Asp
 865 870 875 880
 Thr Leu Glu Leu Thr Arg Gln Val Lys Glu Lys Leu Ala Lys Asn Gly
 885 890 895
 Ile Cys Gln Arg Ile Phe Gly Glu Lys Val Leu Gly Leu Ser Gln Gly
 900 905 910
 Ser Val Ser Asp Met Leu Ser Arg Pro Lys Pro Trp Ser Lys Leu Thr
 915 920 925
 Gln Lys Gly Arg Glu Pro Phe Ile Arg Met Gln Leu Trp Leu Ser Asp
 930 935 940
 Gln Leu Gly Gln Ala Val Gly Gln Gln Pro Gly Ala Ser Gln Ala Ser
 945 950 955 960
 Pro Thr Glu Pro Arg Ser Ser Pro Ser Pro Pro Pro Ser Pro Thr Glu
 965 970 975
 Pro Glu Lys Ser Ser Gln Glu Pro Leu Ser Leu Ser Leu Glu Ser Ser

	980		985		990											
Lys	Glu	Asn	Gln	Gln	Pro	Glu	Gly	Arg	Ser	Ser	Ser	Ser	Ser	Leu	Ser	Gly
	995						1000						1005			
Lys	Met	Tyr	Ser	Gly	Ser	Gln	Ala	Pro	Gly	Gly	Ile	Gln	Glu	Ile	Val	
	1010						1015						1020			
Ala	Met	Ser	Pro	Glu	Leu	Asp	Thr	Tyr	Ser	Ile	Thr	Lys	Arg	Val	Lys	
1025						1030					1035				1040	
Glu	Val	Leu	Thr	Asp	Asn	Asn	Leu	Gly	Gln	Arg	Leu	Phe	Gly	Glu	Ser	
				1045						1050				1055		
Ile	Leu	Gly	Leu	Thr	Gln	Gly	Ser	Val	Ser	Asp	Leu	Leu	Ser	Arg	Pro	
			1060					1065					1070			
Lys	Pro	Trp	His	Lys	Leu	Ser	Leu	Lys	Gly	Arg	Glu	Pro	Phe	Val	Arg	
	1075						1080					1085				
Met	Gln	Leu	Trp	Leu	Asn	Asp	Pro	His	Asn	Val	Glu	Lys	Leu	Arg	Asp	
	1090					1095						1100				
Met	Lys	Lys	Leu	Glu	Lys	Lys	Ala	Tyr	Leu	Lys	Arg	Arg	Tyr	Gly	Leu	
1105						1110					1115				1120	
Ile	Ser	Thr	Gly	Ser	Asp	Ser	Glu	Ser	Pro	Ala	Thr	Arg	Ser	Glu	Cys	
			1125							1130				1135		
Pro	Ser	Pro	Cys	Leu	Gln	Pro	Gln	Asp	Leu	Ser	Leu	Leu	Gln	Ile	Lys	
			1140					1145					1150			
Lys	Pro	Arg	Val	Val	Leu	Ala	Pro	Glu	Glu	Lys	Glu	Ala	Leu	Arg	Lys	
	1155					1160						1165				
Ala	Tyr	Gln	Leu	Glu	Pro	Tyr	Pro	Ser	Gln	Gln	Thr	Ile	Glu	Leu	Leu	
	1170					1175					1180					
Ser	Phe	Gln	Leu	Asn	Leu	Lys	Thr	Asn	Thr	Val	Ile	Asn	Trp	Phe	His	
1185				1190						1195					1200	
Asn	Tyr	Arg	Ser	Arg	Met	Arg	Arg	Glu	Met	Leu	Val	Glu	Gly	Thr	Gln	
			1205						1210					1215		
Asp	Glu	Pro	Asp	Leu	Asp	Pro	Ser	Gly	Gly	Pro	Gly	Ile	Leu	Pro	Pro	
		1220						1225					1230			
Gly	His	Ser	His	Pro	Asp	Pro	Thr	Pro	Gln	Ser	Pro	Asp	Ser	Glu	Thr	
	1235					1240						1245				
Glu	Asp	Gln	Lys	Pro	Thr	Val	Lys	Glu	Leu	Glu	Leu	Gln	Glu	Gly	Pro	
	1250					1255					1260					
Glu	Glu	Asn	Ser	Thr	Pro	Leu	Thr	Thr	Gln	Asp	Lys	Ala	Gln	Val	Arg	
1265				1270						1275				1280		
Ile	Lys	Gln	Glu	Gln	Met	Glu	Glu	Asp	Ala	Glu	Glu	Glu	Ala	Gly	Ser	
			1285					1290						1295		
Gln	Pro	Gln	Asp	Ser	Gly	Glu	Leu	Asp	Lys	Gly	Gln	Gly	Pro	Pro	Lys	
		1300						1305					1310			
Glu	Glu	His	Pro	Asp	Pro	Pro	Gly	Asn	Asp	Gly	Leu	Pro	Lys	Val	Ala	
	1315					1320						1325				
Pro	Gly	Pro	Leu	Leu	Pro	Gly	Gly	Ser	Thr	Pro	Asp	Cys	Pro	Ser	Leu	
	1330					1335					1340					
His	Pro	Gln	Gln	Glu	Ser	Glu	Ala	Gly	Glu	Arg	Leu	His	Pro	Asp	Pro	
1345				1350						1355				1360		
Leu	Ser	Phe	Lys	Ser	Ala	Ser	Glu	Ser	Ser	Arg	Cys	Ser	Leu	Glu	Val	
			1365						1370					1375		
Ser	Leu	Asn	Ser	Pro	Ser	Ala	Ala	Ser	Ser	Pro	Gly	Leu	Met	Met	Ser	
	1380							1385					1390			
Val	Ser	Pro	Val	Pro	Ser	Ser	Ser	Ala	Pro	Ile	Ser	Pro	Ser	Pro	Pro	
	1395						1400					1405				
Gly	Ala	Pro	Pro	Ala	Lys	Val	Pro	Ser	Ala	Ser	Pro	Thr	Ala	Asp	Met	
	1410					1415					1420					
Ala	Gly	Ala	Leu	His	Pro	Ser	Ala	Lys	Val	Asn	Pro	Asn	Leu	Gln	Arg	
1425				1430					1435					1440		
Arg	His	Glu	Lys	Met	Ala	Asn	Leu	Asn	Asn	Ile	Ile	Tyr	Arg	Leu	Glu	
			1445					1450					1455			
Arg	Ala	Ala	Asn	Arg	Glu	Glu	Ala	Leu	Glu	Trp	Glu	Phe				
	1460						1465				1469					

<210> 3409
 <211> 519
 <212> PRT
 <213> Homo sapiens

<221> misc_feature
 <222> (1)...(515)
 <223> Xaa = any amino acid or nothing

<400> 3409
 Gly Pro Leu Ser Pro Gly Pro Tyr Gln Cys Arg Pro Ser Leu Pro Ala
 1 5 10 15
 Gln Leu Tyr Pro Gln Ser Leu Met Ala Ala Ala Thr Leu Arg Thr Pro
 20 25 30
 Thr Gln Gly Thr Val Thr Phe Glu Asp Val Ala Val His Phe Ser Trp
 35 40 45
 Glu Glu Trp Gly Leu Leu Asp Glu Ala Gln Arg Cys Leu Tyr Arg Asp
 50 55 60
 Val Met Leu Glu Asn Leu Ala Leu Leu Thr Ser Leu Asp Val His His
 65 70 75 80
 Gln Lys Gln His Leu Gly Glu Lys His Phe Ile Ser Asn Val Gly Arg
 85 90 95
 Ala Leu Phe Val Lys Thr Cys Thr Phe His Val Ser Gly Glu Pro Ser
 100 105 110
 Thr Cys Arg Glu Val Gly Lys Asp Phe Leu Ala Lys Leu Gly Phe Leu
 115 120 125
 His Gln Gln Ala Ala His Thr Gly Glu Gln Ser Asn Ser Lys Ser Asp
 130 135 140
 Gly Gly Ala Ile Ser His Arg Gly Lys Thr His Tyr Asn Trp Gly Glu
 145 150 155 160
 His Thr Lys Ala Phe Ser Gly Lys His Thr Leu Val Gln Gln Gln Arg
 165 170 175
 Thr Leu Thr Thr Glu Arg Cys Tyr Ile Cys Ser Glu Cys Gly Lys Ser
 180 185 190
 Phe Ser Lys Ser Tyr Ser Leu Asn Asp His Trp Arg Leu His Thr Gly
 195 200 205
 Glu Lys Pro Tyr Glu Cys Arg Glu Cys Gly Lys Ser Phe Arg Gln Ser
 210 215 220
 Ser Ser Leu Ile Gln His Arg Arg Gly His Thr Ala Val Arg Pro His
 225 230 235 240
 Glu Cys Asp Glu Cys Gly Lys Leu Phe Ser Asn Lys Ser Asn Leu Ile
 245 250 255
 Lys His Arg Arg Val His Thr Gly Glu Arg Pro Tyr Glu Cys Ser Glu
 260 265 270
 Cys Gly Lys Ser Phe Asn Gln Arg Ser Ala Leu Leu Gln His Arg Gly
 275 280 285
 Val His Thr Gly Glu Lys Pro Tyr Glu Cys Thr Glu Cys Gly Lys Ser
 290 295 300
 Phe Ser His Asn Ser Ser Leu Ile Lys His Gln Arg Ile His Ser Gly
 305 310 315 320
 Xaa Arg Pro Tyr Glu Cys Thr Glu Cys Gly Lys Ser Phe Ser Gln Asn
 325 330 335
 Ser Ser Leu Ile Glu His His Arg Val His Thr Gly Glu Arg Pro Tyr
 340 345 350
 Lys Cys Ser Glu Cys Gly Lys Ser Phe Arg Gln Arg Ser Ala Leu Leu
 355 360 365
 Gln His Arg Gly Val Pro Thr Gly Glu Arg Pro Tyr Glu Cys Ser Glu
 370 375 380
 Cys Gly Lys Phe Phe Pro Tyr Ser Ser Ser Leu Gly Lys His Gln Arg
 385 390 395 400
 Val His Thr Gly Ser Arg Pro Tyr Glu Cys Ser Glu Cys Gly Lys Ser
 405 410 415
 Phe Thr Gln Asn Ser Gly Leu Ile Lys His Arg Arg Val His Thr Gly

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      420      425      430
Glu Lys Pro Tyr Glu Cys Thr Glu Xaa Lys Lys Ser Phe Ser His Asn
      435      440      445
Ser Ser Leu Ile Lys His Gln Arg Ile His Ser Arg Xaa Lys Pro Tyr
      450      455      460
Glu Cys Lys Cys Gly Asn Arg Xaa His Pro Gly Glu Ser Pro Xaa Val
      465      470      475      480
His Ser Glu Cys Gln Lys Ser Phe Ser Xaa Arg Pro Tyr Leu Ile Glu
      485      490      495
Cys His Thr Val His Lys Gly Lys Thr Leu Leu Ile Cys Arg Asp Val
      500      505      510
Gln Leu Ile
      515

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<210> 3410
<211> 211
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(207)
<223> Xaa = any amino acid or nothing

```

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      <400> 3410
Leu Cys Met Lys Gly Ile Ser Gly Gly Val Arg Val Ala Ala Leu Ala
  1          5          10          15
Ala Arg Ala Glu Arg Glu Glu Leu Pro Val Pro Ala Met Glu Pro Gln
      20      25      30
Pro Thr Ala Trp Gly Ser Pro His Pro Glu Ala Val Leu Gln Leu Glu
      35      40      45
Val Ala Pro Glu Ser Ser Gly Pro Cys Thr Asp Thr Ala Lys Asp Gln
      50      55      60
Gln Ser Asp Lys Leu Pro Asp Leu Met Pro Pro Ala Glu Pro Leu Gly
      65      70      75      80
Ser Ala Leu Glu Leu Arg Ala Ser Leu Glu Ile Asp Val Ala Glu Arg
      85      90      95
Gly Cys Glu His Gly Pro Ser Gln Gln Leu Pro Arg Cys Pro Xaa Ser
      100      105      110
Trp Ala Trp Ser Glu Pro Trp Cys Gln Arg Pro Gly Cys Ala Val Xaa
      115      120      125
Ala Pro Leu Pro Tyr Xaa Arg Glu Ala Ser Phe Ile Tyr Gln Ser His
      130      135      140
Ser Pro Ala Ala Ser Gly Pro Phe His Ser Ala Gly Ala Gly Ala Val
      145      150      155      160
Tyr Leu Gln Ala Gly Gly Val Gly Glu Gln Glu Lys Glu Ala Val Arg
      165      170      175
Lys Gly Ser Gly Ser Ser Ser Cys Ser Gln Arg Gly Pro Pro Pro Pro
      180      185      190
Gly Met Glu Val Cys Pro Leu Leu Gly Phe Trp Ala Ile Cys Pro
      195      200      205      207

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<210> 3411
<211> 149
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(148)
<223> Xaa = any amino acid or nothing

```

<400> 3411
 Ala Ser Leu Ser Lys Pro Ala Gly Ile Ser Thr Met Pro Trp Ala Leu
 1 5 10 15
 Ile Leu Leu Phe Leu Leu Thr His Ser Ala Val Ser Val Val Gln Ala
 20 25 30
 Gly Leu Thr Gln Pro Pro Ser Val Ser Lys Asp Leu Arg Gln Thr Ala
 35 40 45
 Thr Leu Thr Cys Thr Gly Asn Ser Asn Asn Val Gly His Gln Gly Val
 50 55 60
 Ile Trp Leu Gln Gln His Gln Gly His Pro Pro Lys Leu Leu Ser Tyr
 65 70 75 80
 Arg Asn Asn Asn Arg Pro Ser Gly Ile Ser Glu Arg Leu Ser Ala Tyr
 85 90 95
 Lys Ser Gly Asn Ala Ala Ser Leu Thr Ile Tyr Gly Leu Gln Thr Glu
 100 105 110
 His Glu Ala Asp Xaa Xaa Cys Arg Pro Arg Arg Lys Leu Ile Pro Lys
 115 120 125
 Thr Ala Arg Leu Phe Phe Phe Phe Leu Ile Asp Asn Glu Glu Tyr Leu
 130 135 140
 Leu Arg Val Tyr
 145 148

<210> 3412

<211> 695

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(694)

<223> Xaa = any amino acid or nothing

<400> 3412
 Arg Arg Gly Ile Pro Gly Ser Ala Ser Leu Ser Leu Thr Met Cys Val
 1 5 10 15
 Arg Ser Cys Phe Gln Ser Pro Arg Leu Gln Trp Val Trp Arg Thr Ala
 20 25 30
 Phe Leu Lys His Thr Gln Arg Arg His Gln Gly Ser His Arg Trp Thr
 35 40 45
 His Leu Gly Gly Ser Thr Tyr Arg Ala Val Ile Phe Asp Met Gly Gly
 50 55 60
 Val Leu Ile Pro Ser Pro Gly Arg Val Ala Ala Glu Trp Glu Val Gln
 65 70 75 80
 Asn Arg Ile Pro Ser Gly Thr Ile Leu Lys Ala Leu Met Glu Gly Gly
 85 90 95
 Glu Asn Gly Pro Trp Met Arg Phe Met Arg Ala Glu Ile Thr Ala Glu
 100 105 110
 Gly Phe Leu Arg Glu Phe Gly Arg Leu Cys Ser Glu Met Leu Lys Thr
 115 120 125
 Ser Val Pro Val Asp Ser Phe Phe Ser Leu Leu Thr Ser Glu Arg Val
 130 135 140
 Ala Lys Gln Phe Pro Val Met Thr Glu Ala Ile Thr Gln Ile Arg Ala
 145 150 155 160
 Lys Gly Leu Gln Thr Ala Val Leu Ser Asn Asn Phe Tyr Leu Pro Asn
 165 170 175
 Gln Lys Ser Phe Leu Pro Leu Asp Arg Lys Gln Phe Asp Val Ile Val
 180 185 190
 Glu Ser Cys Met Glu Gly Ile Cys Lys Pro Asp Pro Arg Ile Tyr Lys
 195 200 205
 Leu Cys Leu Glu Gln Leu Gly Leu Gln Pro Ser Glu Ser Ile Phe Leu

210	215	220
Asp Asp Leu Gly Thr	Asn Leu Lys Glu Ala	Ala Arg Leu Gly Ile His
225	230	235
Thr Ile Lys Val	Asn Asp Pro Glu Thr	Ala Val Lys Glu Leu Glu Ala
245	250	255
Leu Leu Gly Phe Thr	Leu Arg Val Gly Val	Pro Asn Thr Arg Pro Val
260	265	270
Lys Lys Thr Met Glu Ile	Pro Lys Asp Ser Leu	Gln Lys Tyr Leu Lys
275	280	285
Asp Leu Leu Gly Ile	Gln Thr Thr Gly Pro	Leu Glu Leu Leu Gln Phe
290	295	300
Asp His Gly Gln Ser	Asn Pro Thr Tyr Tyr	Ile Arg Leu Ala Asn Arg
305	310	315
Asp Leu Val Leu Arg	Lys Lys Pro Pro Gly	Thr Leu Leu Pro Ser Ala
325	330	335
His Ala Ile Glu Arg	Glu Phe Arg Ile Met	Lys Ala Leu Ala Asn Ala
340	345	350
Gly Val Pro Val	Pro Asn Val Leu Asp	Leu Cys Glu Asp Ser Ser Val
355	360	365
Ile Gly Thr Pro Phe	Tyr Val Met Glu Tyr	Cys Pro Gly Leu Ile Tyr
370	375	380
Lys Asp Pro Ser Leu	Pro Gly Leu Glu Pro	Ser His Arg Arg Ala Ile
385	390	395
Tyr Thr Ala Met	Asn Thr Val Leu Cys	Lys Ile His Ser Val Asp Leu
405	410	415
Gln Ala Val Gly Leu	Glu Asp Tyr Gly Lys	Gln Gly Ser Thr Thr Trp
420	425	430
Val Tyr Ser Ser Arg	Arg Ala Arg Gly Ala	Leu Leu Phe Leu Asp Trp
435	440	445
Glu Leu Ser Tyr Pro	Trp Gly Asp Pro Phe	Ala Asp Val Gly Tyr Ser
450	455	460
Cys Leu Ala His Tyr	Leu Pro Ser Ser Phe	Pro Val Leu Arg Gly Ile
465	470	475
Asn Asp Cys Asp Leu	Thr Gln Leu Gly Ile	Pro Ala Ala Glu Glu Tyr
485	490	495
Phe Arg Met Tyr Cys	Leu Gln Met Gly Leu	Pro Pro Thr Glu Asn Trp
500	505	510
Asn Phe Tyr Met Ala	Phe Ser Phe Phe Arg	Val Ala Ala Ile Leu Gln
515	520	525
Gly Val Tyr Lys Arg	Ser Leu Thr Gly Gln	Ala Ser Ser Thr Tyr Ala
530	535	540
Glu Gln Thr Gly Lys	Leu Thr Glu Phe Val	Ser Asn Leu Ala Trp Asp
545	550	555
Phe Ala Val Lys Glu	Gly Phe Arg Val Phe	Lys Glu Met Pro Phe Thr
565	570	575
Asn Pro Leu Thr Arg	Ser Tyr His Thr Trp	Ala Arg Pro Gln Ser Gln
580	585	590
Trp Cys Pro Thr Gly	Ser Arg Ser Tyr Ser	Ser Val Pro Glu Ala Ser
595	600	605
Pro Ala His Thr Ser	Arg Gly Gly Leu Val	Ile Ser Pro Glu Ser Leu
610	615	620
Ser Pro Pro Val Arg	Glu Leu Tyr His Arg	Leu Lys His Phe Met Glu
625	630	635
Gln Arg Val Tyr Pro	Ala Glu Pro Glu Leu	Gln Ser His Gln Ala Ser
645	650	655
Ala Ala Arg Trp Ser	Pro Ser Pro Leu Ile	Glu Asp Leu Lys Val Lys
660	665	670
Gln Pro Trp Xaa Gly	Gly Arg Thr Ser Trp	Arg Leu Leu
675	680	685
Ala Leu Gly Cys His	Thr	
690	694	

<210> 3413
 <211> 492
 <212> PRT
 <213> Homo sapiens

<221> misc_feature
 <222> (1)...(490)
 <223> Xaa = any amino acid or nothing

<400> 3413
 Pro Glu Ser Arg His Gln Cys Phe Ser Asp Arg Ser Ser His Phe Leu
 1 5 10 15
 Thr Met Glu Met Glu Gln Glu Lys Met Thr Met Asn Lys Glu Leu Ser
 20 25 30
 Pro Asp Ala Ala Ala Tyr Cys Cys Ser Ala Cys His Gly Asp Glu Thr
 35 40 45
 Trp Ser Tyr Asn His Pro Ile Arg Gly Arg Ala Lys Ser Arg Ser Leu
 50 55 60
 Ser Ala Ser Pro Ala Leu Gly Ser Thr Lys Glu Phe Arg Arg Thr Arg
 65 70 75 80
 Ser Leu His Gly Pro Cys Pro Val Thr Thr Phe Gly Pro Lys Ala Cys
 85 90 95
 Val Leu Gln Asn Pro Gln Thr Ile Met His Ile Gln Asp Pro Ala Ser
 100 105 110
 Gln Arg Leu Thr Trp Asn Lys Ser Pro Lys Ser Val Leu Val Ile Lys
 115 120 125
 Lys Met Arg Asp Ala Ser Leu Leu Gln Pro Phe Lys Glu Leu Cys Thr
 130 135 140
 His Leu Met Glu Glu Asn Met Ile Val Tyr Val Glu Lys Lys Val Leu
 145 150 155 160
 Glu Asp Pro Ala Ile Ala Ser Asp Glu Ser Phe Gly Ala Val Lys Lys
 165 170 175
 Lys Phe Cys Thr Phe Arg Glu Asp Tyr Asp Asp Ile Ser Asn Gln Ile
 180 185 190
 Asp Phe Ile Ile Cys Leu Gly Gly Asp Gly Thr Leu Leu Tyr Ala Ser
 195 200 205
 Ser Leu Phe Gln Gly Ser Val Pro Pro Val Met Ala Phe His Leu Gly
 210 215 220
 Ser Leu Gly Phe Leu Thr Pro Phe Ser Phe Glu Asn Phe Gln Ser Gln
 225 230 235 240
 Val Thr Gln Val Ile Glu Gly Asn Ala Ala Val Val Leu Arg Gly Ser
 245 250 255
 Arg Leu Lys Val Arg Val Val Lys Glu Leu Arg Gly Lys Lys Thr Ala
 260 265 270
 Val His Asn Gly Leu Gly Glu Lys Gly Ser Gln Ala Ala Gly Leu Asp
 275 280 285
 Met Asp Val Gly Lys Gln Ala Met Gln Tyr Gln Val Leu Asn Glu Val
 290 295 300
 Val Ile Asp Arg Gly Pro Ser Ser Tyr Leu Ser Asn Val Asp Val Tyr
 305 310 315 320
 Leu Asp Gly His Leu Ile Thr Thr Val Gln Gly Asp Gly Xaa Gly Pro
 325 330 335
 Gln His Leu Ser Trp Gly Pro Xaa Ala Phe Leu Gly Arg Glu Xaa Arg
 340 345 350
 Leu Arg Leu Ser Leu Ser Gly Val Ile Val Ser Thr Pro Thr Gly Ser
 355 360 365
 Thr Ala Tyr Ala Ala Ala Ala Gly Ala Ser Met Ile His Pro Asn Val
 370 375 380
 Pro Ala Ile Met Ile Thr Pro Ile Cys Pro His Ser Leu Ser Phe Arg
 385 390 395 400
 Pro Ile Val Val Pro Ala Gly Val Glu Leu Lys Ile Met Leu Ser Pro
 405 410 415
 Glu Ala Arg Asn Thr Ala Trp Val Ser Phe Asp Gly Arg Lys Arg Gln

```

      420      425      430
Glu Ile Arg His Gly Asp Ser Ile Ser Ile Thr Thr Ser Cys Tyr Pro
      435      440      445
Leu Pro Ser Ile Cys Val Arg Asp Pro Val Ser Asp Trp Phe Glu Ser
      450      455      460
Leu Ala Gln Cys Leu His Trp Asn Val Arg Lys Lys Gln Ala His Phe
      465      470      475      480
Glu Glu Glu Glu Glu Glu Glu Glu Glu Gly
      485      490

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<210> 3414

<211> 863

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(860)

<223> Xaa = any amino acid or nothing

<400> 3414

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Val Ile Val Asn Lys Asn Val Asn Trp Ile Asn Tyr Ile Tyr Tyr Asn
  1      5      10      15
Gln Gln Gln Arg Ala Phe His Glu Leu Lys Glu Lys Leu Met Ser Ala
      20      25      30
Leu Ala Leu Gly Leu Pro Asp Leu Thr Lys Pro Phe Thr Phe Tyr Glu
      35      40      45
Ser Glu Arg Glu Lys Met Ala Val Gly Val Leu Thr Gln Thr Val Gly
      50      55      60
Pro Trp Pro Arg Pro Val Ala Tyr Leu Ser Lys Gln Leu Asp Gly Val
      65      70      75      80
Ser Lys Gly Trp Pro Cys Leu Arg Ala Leu Ala Ala Thr Ala Leu
      85      90      95
Leu Ala Gln Glu Ala Asp Lys Leu Thr Leu Gly Gln Asn Leu Asn Ile
      100      105      110
Lys Ala Pro His Ala Val Val Thr Leu Met Asn Thr Lys Gly His His
      115      120      125
Trp Leu Thr Asn Ala Arg Leu Thr Lys Tyr Gln Ser Leu Pro Cys Glu
      130      135      140
Asn Pro His Ile Thr Ile Glu Val Cys Asn Thr Leu Asn Pro Thr Thr
      145      150      155      160
Leu Leu Pro Val Ser Glu Ser Pro Gly Glu His Asn Cys Val Glu Val
      165      170      175
Leu Asp Ser Val Tyr Ser Ser Arg Pro Asp Leu Arg Asp Gln Pro Trp
      180      185      190
Ala Ser Ser Val Asp Trp Glu Leu Tyr Met Asp Gly Ser Ser Phe Ile
      195      200      205
Asn Ser Gln Gly Glu Arg Cys Ala Gly Tyr Ala Val Val Thr Leu Asp
      210      215      220
Ala Val Ile Lys Ala Lys Leu Trp Leu Gln Gly Thr Ser Ala Gln Lys
      225      230      235      240
Ala Glu Leu Ile Ala Leu Thr Arg Ala Val Glu Leu Ser Glu Gly Gln
      245      250      255
Glu Ser Leu Glu Glu Leu Leu Gly Arg Tyr Phe Tyr Val Ser His Leu
      260      265      270
Pro Ala Phe Ala Lys Ala Val Ala Gln Leu Cys Ile Thr Cys Arg Gln
      275      280      285
His Asn Ala Arg Gln Ser Pro Thr Val Ser Pro His Ile Gln Ala Tyr
      290      295      300
Gly Ala Ala Pro Phe Glu Asp Leu Gln Val Asp Phe Thr Glu Met Pro
      305      310      315      320
Lys Cys Gly Gly Asn Lys Tyr Leu Leu Val Leu Thr Cys Thr Tyr Ser

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															325																		330																		335		
Gly	Trp	Val	Glu	Ala	Tyr	Pro	Thr	Arg	Thr	Glu	Lys	Ala	Tyr	Glu	Val																																						
															340																		345																		350		
Thr	Arg	Val	Leu	Leu	Arg	Asp	Leu	Ile	Pro	Arg	Phe	Gly	Leu	Pro	Leu																																						
															355																		360																		365		
Arg	Ile	Gly	Ser	His	Asn	Gly	Pro	Val	Phe	Val	Ala	Asp	Leu	Asp	Cys																																						
															370																		375																		380		
Val	Glu	Ile	Asn	Val	Asp	Thr	Gly	Val	Ile	Trp	Ala	Thr	Trp	Ile	Lys																																						
															385																		390																		395		
Asn	Glu	Lys	Asp	Pro	Val	Gln	Leu	Gln	Lys	Gly	Lys	Ser	Gly	Pro	Ser																																						
															405																		410																		415		
Cys	Thr	Lys	Gly	Gln	Cys	Asn	Pro	Leu	Glu	Leu	Val	Ile	Thr	Asn	Pro																																						
															420																		425																		430		
Leu	Asp	Pro	Arg	Trp	Lys	Lys	Gly	Glu	Arg	Val	Thr	Leu	Gly	Ile	Asn																																						
															435																		440																		445		
Gly	Ala	Gly	Leu	Asn	Pro	Arg	Val	Asn	Ile	Leu	Val	Arg	Gly	Glu	Val																																						
															450																		455																		460		
Tyr	Lys	Cys	Ser	Leu	Glu	Pro	Val	Phe	Gln	Thr	Phe	Tyr	Asp	Glu	Leu																																						
															465																		470																		475		
Asn	Val	Pro	Ile	Thr	Glu	Phe	Pro	Gly	Lys	Thr	Arg	Asn	Leu	Phe	Leu																																						
															485																		490																		495		
Gln	Leu	Ala	Glu	His	Val	Ala	Gln	Ser	Leu	Thr	Val	Thr	Ser	Cys	Tyr																																						
															500																		505																		510		
Val	Cys	Gly	Gly	Thr	Val	Ile	Ala	Asp	Gln	Trp	Pro	Trp	Glu	Ala	Arg																																						
															515																		520																		525		
Glu	Leu	Val	Pro	Thr	Asp	Pro	Val	Pro	Asp	Glu	Phe	Pro	Ala	Gln	Lys																																						
															530																		535																		540		
Asn	His	Pro	Asp	Asn	Phe	Trp	Val	Leu	Lys	Ala	Ser	Ile	Ile	Arg	Gln																																						
															545																		550																		555		
Tyr	Tyr	Ile	Ala	Arg	Val	Glu	Lys	Asp	Phe	Thr	Leu	Pro	Val	Gly	Arg																																						
															565																		570																		575		
Leu	His	Gly	Gly	Arg	Ser	Asn	His	Thr	Glu	Lys	Asn	Pro	Phe	Ser	Lys																																						
															580																		585																		590		
Phe	Pro	Lys	Leu	Gln	Thr	Val	Xaa	Ala	His	Pro	Glu	Ser	His	Arg	Asp																																						
															595																		600																		605		
Trp	Thr	Ala	Pro	Thr	Gly	Leu	Tyr	Trp	Ile	Cys	Gly	His	Arg	Ala	Tyr																																						
															610																		615																		620		
Thr	Lys	Leu	Pro	Ala	Ser	Ser	Cys	Val	Ile	Gly	Thr	Ile	Lys	Pro	Ser																																						
															625																		630																		635		
Phe	Phe	Leu	Leu	Ser	Ile	Lys	Thr	Gly	Glu	Leu	Leu	Gly	Phe	Pro	Val																																						
															645																		650																		655		
Tyr	Ala	Ser	Arg	Lys	Ser	Ile	Ala	Ile	Arg	Asn	Xaa	Asn	Asn	Asp	Lys																																						
															660																		665																		670		
Trp	Pro	Pro	Glu	Arg	Ile	Ile	Gln	Tyr	Tyr	Gly	Pro	Ala	Thr	Xaa	Ala																																						
															675																		680																		685		
Gln	Asp	Gly	Ser	Trp	Gly	Tyr	Arg	Ile	Pro	Ile	Tyr	Met	Ile	Asn	Arg																																						
															690																		695																		700		
Ile	Ile	Arg	Leu	Gln	Ala	Val	Leu	Lys	Ile	Ile	Thr	Ala	Thr	Gly	Arg																																						
															705																		710																		715		
Ala	Leu	Thr	Ile	Leu	Ala	Gln	Gln	Glu	Thr	Gln	Met	Arg	Asn	Ala	Ile																																						
															725																		730																		735		
Tyr	Gln	Asn	Arg	Leu	Ala	Leu	Asp	Tyr	Leu	Leu	Ala	Ala	Glu	Gly	Glu																																						
															740																		745																		750		
Val	Cys	Arg	Lys	Phe	Asn	Leu	Thr	Asn	Cys	Cys	Leu	His	Ile	Asp	Asn																																						
															755																		760																		765		
Gln	Gly	Gln	Val	Val	Glu	Asp	Ile	Val	Arg	Asp	Met	Thr	Lys	Val	Ala																																						
															770																		775																		780		
His	Val	Pro	Val	Gln	Val	Trp	His	Gly	Phe	Asp	Pro	Gly	Ala	Met	Phe																																						
															785																		790																		795		
Arg	Lys	Trp	Phe	Pro	Ala	Leu	Gly	Gly	Phe	Lys	Thr	Leu	Ile	Ile	Arg																																						
															805																		810																		815		
Val	Ile	Ile	Val	Ile	Gly	Thr	Tyr	Leu	Leu	Leu	Pro	Arg	Leu	Leu	Pro																																						
															820																		825																		830		
Val	Leu	Leu	Gln	Met	Ile	Lys	Ser	Phe	Ile	Ala	Thr	Leu	Val	Tyr	Gln																																						

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<210> 3415
<211> 120
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(117)
<223> Xaa = any amino acid or nothing
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<210> 3416
<211> 294
<212> PRT
<213> Homo sapiens
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5101

				165					170				175				
Lys	Leu	Gly	Gly	Pro	Thr	Pro	Ser	Thr	Glu	Leu	Pro	Gly	Leu	Gln	Pro		
				180					185				190				
His	Ala	Pro	Thr	Pro	His	Thr	Ala	Pro	Ala	Thr	Pro	Thr	Tyr	Ser	Pro		
				195				200					205				
Ala	Pro	Asp	Thr	Pro	Asn	Pro	Pro	Val	Arg	Trp	Lys	Cys	Pro	Leu	Pro		
				210				215				220					
Val	Glu	Pro	Arg	Thr	Arg	Gln	Leu	Cys	Arg	Glu	Arg	Thr	Arg	Lys	Ala		
				225		230				235					240		
Cys	Pro	Pro	Lys	Pro	Arg	Pro	Pro	Leu	Gly	Leu	Pro	Gly	Asp	Pro	Thr		
				245					250					255			
Gly	Pro	Val	Thr	His	His	Ala	Pro	Pro	Val	Ser	Pro	Thr	Gly	Ala	Ser		
				260					265					270			
Gly	Gln	Glu	Arg	Arg	Ala	Glu	Pro	Gly	Ala	Val	Ser	Tyr	Ala	His	Ala		
				275				280					285				
Ser	Ala	Thr	Lys														
				290													
				292													

<210> 3417
 <211> 202
 <212> PRT
 <213> Homo sapiens

Cys	Leu	Lys	Tyr	Met	Tyr	Thr	Tyr	Ile	Phe	Cys	Pro	Asn	Cys	Val	Ser		
				5					10					15			
Tyr	Lys	Met	Lys	Thr	Asp	His	Phe	Ser	Leu	Arg	Tyr	Leu	His	Ser	Ser		
				20				25					30				
Cys	Ala	Glu	Asp	Asn	Lys	Ser	Ser	Val	Asp	Ser	Ser	Gly	Gln	Ala	Ala		
				35				40				45					
His	Pro	Ser	Lys	Gly	Lys	Phe	Pro	His	Gly	Thr	His	Trp	Gly	Thr			
				50		55				60							
Gln	Cys	Arg	Gly	His	Ile	Ser	Val	Leu	Gly	Trp	Gln	Cys	Ser	Cys	Pro		
				65	70				75						80		
Ser	Thr	Gly	Cys	Arg	Val	Gly	Leu	Gly	Leu	Ala	Met	Cys	Gln	Thr	His		
				85				90					95				
Ala	Tyr	Ile	His	Thr	His	Thr	His	Thr	His	Thr	His	Thr	Pro	Thr	Asp		
				100				105					110				
Tyr	Gly	Ala	His	His	Thr	Asp	Pro	Leu	Gln	Arg	Trp	Gly	Leu	Gly	Pro		
				115				120				125					
Arg	Lys	Ser	Glu	Ala	Gly	Pro	Leu	Pro	Gln	Leu	Ser	Arg	Asp	Gln	Ser		
				130				135				140					
His	Pro	Gly	Pro	Leu	Ser	Pro	Gly	Ala	Ser	Pro	Arg	Ser	Ala	Gly	Leu		
				145		150				155					160		
Pro	Gly	Trp	His	Pro	Ala	His	Gln	Glu	Pro	Arg	Ala	Arg	Gly	Arg	Cys		
				165				170						175			
Ala	Arg	Asp	Gly	Leu	Ser	Leu	Gln	Thr	Arg	Leu	Thr	Asn	Lys	Tyr	Asp		
				180				185					190				
Ile	Gln	Cys	Cys	Gln	Glu	Met	Arg	Lys									
				195				200	201								

<210> 3418
 <211> 1024
 <212> PRT
 <213> Homo sapiens

<400> 3418
 Leu Asp Glu Tyr Glu Ala Arg Leu Thr Leu Ala Asn Leu Asp Asp Phe

1	5	10	15
Glu Glu Asp Asn Glu Asp Asp Asp Glu Asn Arg Val Asn Gln Glu Glu			
	20	25	30
Lys Ala Ala Lys Ile Thr Glu Leu Ile Asn Lys Leu Asn Phe Leu Asp			
	35	40	45
Glu Ala Glu Lys Asp Leu Ala Thr Val Asn Ser Asn Pro Phe Asp Asp			
	50	55	60
Pro Asp Ala Ala Glu Leu Asn Pro Phe Gly Asp Pro Asp Ser Glu Glu			
	65	70	75
Pro Ile Thr Glu Thr Ala Ser Pro Arg Lys Thr Glu Asp Ser Phe Tyr			
	85	90	95
Asn Asn Ser Tyr Asn Pro Phe Lys Glu Val Gln Thr Pro Gln Tyr Leu			
	100	105	110
Asn Pro Phe Asp Glu Pro Glu Ala Phe Val Thr Ile Lys Asp Ser Pro			
	115	120	125
Pro Gln Ser Thr Lys Arg Lys Asn Ile Arg Pro Val Asp Met Ser Lys			
	130	135	140
Tyr Leu Tyr Ala Asp Ser Ser Lys Thr Glu Glu Glu Glu Leu Asp Glu			
	145	150	155
Ser Asn Pro Phe Tyr Glu Pro Lys Ser Thr Pro Pro Pro Asn Asn Leu			
	165	170	175
Val Asn Pro Val Gln Glu Leu Glu Thr Glu Arg Arg Val Lys Arg Lys			
	180	185	190
Ala Pro Ala Pro Pro Val Leu Ser Pro Lys Thr Gly Val Leu Asn Glu			
	195	200	205
Asn Thr Val Ser Ala Gly Lys Asp Leu Ser Thr Ser Pro Lys Pro Ser			
	210	215	220
Pro Ile Pro Ser Pro Val Leu Gly Arg Lys Pro Asn Ala Ser Gln Ser			
	225	230	235
Leu Leu Val Trp Cys Lys Glu Val Thr Lys Asn Tyr Arg Gly Val Lys			
	245	250	255
Ile Thr Asn Phe Thr Thr Ser Trp Arg Asn Gly Leu Ser Phe Cys Ala			
	260	265	270
Ile Leu His His Phe Arg Pro Asp Leu Ile Asp Tyr Lys Ser Leu Asn			
	275	280	285
Pro Gln Asp Ile Lys Glu Asn Asn Lys Lys Ala Tyr Asp Gly Phe Ala			
	290	295	300
Ser Ile Gly Ile Ser Arg Leu Leu Glu Pro Ser Asp Met Val Leu Leu			
	305	310	315
Ala Ile Pro Asp Lys Leu Thr Val Met Thr Tyr Leu Tyr Gln Ile Arg			
	325	330	335
Ala His Phe Ser Gly Gln Glu Leu Asn Val Val Gln Ile Glu Glu Asn			
	340	345	350
Ser Ser Lys Ser Thr Tyr Lys Val Gly Asn Tyr Glu Thr Asp Thr Asn			
	355	360	365
Ser Ser Val Asp Gln Glu Lys Phe Tyr Ala Glu Leu Ser Asp Leu Lys			
	370	375	380
Arg Glu Pro Glu Leu Gln Gln Pro Ile Ser Gly Ala Val Asp Phe Leu			
	385	390	395
Ser Gln Asp Asp Ser Val Phe Val Asn Asp Ser Gly Val Gly Glu Ser			
	405	410	415
Glu Ser Glu His Gln Thr Pro Asp Asp His Leu Ser Pro Ser Thr Ala			
	420	425	430
Ser Pro Tyr Cys Arg Arg Thr Lys Ser Asp Thr Glu Pro Gln Lys Ser			
	435	440	445
Gln Gln Ser Ser Gly Arg Thr Ser Gly Ser Asp Asp Pro Gly Ile Cys			
	450	455	460
Ser Asn Thr Asp Ser Thr Gln Ala Gln Val Leu Leu Gly Lys Lys Arg			
	465	470	475
Leu Leu Lys Ala Glu Thr Leu Glu Leu Ser Asp Leu Tyr Val Ser Asp			
	485	490	495
Lys Lys Lys Asp Met Ser Pro Pro Phe Ile Cys Glu Glu Thr Asp Glu			
	500	505	510
Gln Lys Leu Gln Thr Leu Asp Ile Gly Ser Asn Leu Glu Lys Glu Lys			

515	520	525
Leu Glu Asn Ser Arg Ser	Leu Glu Cys Arg Ser Asp	Pro Glu Ser Pro
530	535	540
Ile Lys Lys Thr Ser	Leu Ser Pro Thr Ser Lys	Leu Gly Tyr Ser Tyr
545	550	555
Ser Arg Asp Leu Asp	Leu Ala Lys Lys Lys His	Ala Ser Leu Arg Gln
565	570	575
Thr Glu Ser Asp Pro Asp	Ala Asp Arg Thr Thr	Leu Asn His Ala Asp
580	585	590
His Ser Ser Lys Ile Val	Gln His Arg Leu Leu	Ser Arg Gln Glu Glu
595	600	605
Leu Lys Glu Arg Ala Arg	Val Leu Leu Glu Gln	Ala Arg Arg Asp Ala
610	615	620
Ala Leu Lys Ala Gly Asn	Lys His Asn Thr Asn	Thr Ala Thr Pro Phe
625	630	635
Cys Asn Arg Gln Leu Ser	Asp Gln Gln Asp Glu	Glu Arg Arg Arg Gln
645	650	655
Leu Arg Glu Arg Ala Arg	Gln Leu Ile Ala Glu	Ala Arg Ser Gly Val
660	665	670
Lys Met Ser Glu Leu Pro	Ser Tyr Gly Glu Met	Ala Ala Glu Lys Leu
675	680	685
Lys Glu Arg Ser Lys Ala	Ser Gly Asp Glu Asn	Asp Asn Ile Glu Ile
690	695	700
Asp Thr Asn Glu Glu Ile	Pro Glu Gly Phe Val	Val Gly Gly Gly Asp
705	710	715
Glu Leu Thr Asn Leu Glu	Asn Asp Leu Asp Thr	Pro Glu Gln Asn Ser
725	730	735
Lys Leu Val Asp Leu Lys	Leu Lys Lys Leu Leu	Glu Val Gln Pro Gln
740	745	750
Val Ala Asn Ser Pro Ser	Ser Ala Ala Gln Lys	Ala Val Thr Glu Ser
755	760	765
Ser Glu Gln Asp Met Lys	Ser Gly Thr Glu Asp	Leu Arg Thr Glu Arg
770	775	780
Leu Gln Lys Thr Thr Glu	Arg Phe Arg Asn Pro	Val Val Phe Ser Lys
785	790	795
Asp Ser Thr Val Arg Lys	Thr Gln Leu Gln Ser	Phe Ser Gln Tyr Ile
805	810	815
Glu Asn Arg Pro Glu Met	Lys Arg Gln Arg Ser	Ile Gln Glu Asp Thr
820	825	830
Lys Lys Gly Asn Glu Glu	Lys Ala Ala Ile Thr	Glu Thr Gln Arg Lys
835	840	845
Pro Ser Glu Asp Glu Val	Leu Asn Lys Gly Phe	Lys Asp Ser Ser Gln
850	855	860
Tyr Val Val Gly Glu Leu	Ala Ala Leu Glu Asn	Glu Gln Lys Gln Ile
865	870	875
Asp Thr Arg Ala Ala Leu	Val Glu Lys Arg Leu	Arg Tyr Leu Met Asp
885	890	895
Thr Gly Arg Asn Thr Glu	Glu Glu Glu Ala Met	Met Gln Glu Trp Phe
900	905	910
Met Leu Val Asn Lys Lys	Asn Ala Leu Ile Arg	Arg Met Asn Gln Leu
915	920	925
Ser Leu Leu Glu Lys Glu	His Asp Leu Glu Arg	Arg Tyr Glu Leu Leu
930	935	940
Asn Arg Glu Leu Arg Ala	Met Leu Ala Ile Glu	Asp Trp Gln Lys Thr
945	950	955
Glu Ala Gln Lys Arg Arg	Glu Gln Leu Leu Leu	Asp Glu Leu Val Ala
965	970	975
Leu Val Asn Lys Arg Asp	Ala Leu Val Arg Asp	Leu Asp Ala Gln Glu
980	985	990
Lys Gln Ala Glu Glu Glu	Asp Glu His Leu Glu	Arg Thr Leu Glu Gln
995	1000	1005
Asn Lys Gly Lys Met Ala	Lys Lys Glu Glu Lys	Cys Val Leu Gln
1010	1015	1020
		1023

<210> 3419
 <211> 1024
 <212> PRT
 <213> Homo sapiens

<400> 3419
 Leu Asp Glu Tyr Glu Ala Arg Leu Thr Leu Ala Asn Leu Asp Asp Phe
 1 5 10 15
 Glu Glu Asp Asn Glu Asp Asp Asp Glu Asn Arg Val Asn Gln Glu Glu
 20 25 30
 Lys Ala Ala Lys Ile Thr Glu Leu Ile Asn Lys Leu Asn Phe Leu Asp
 35 40 45
 Glu Ala Glu Lys Asp Leu Ala Thr Val Asn Ser Asn Pro Phe Asp Asp
 50 55 60
 Pro Asp Ala Ala Glu Leu Asn Pro Phe Gly Asp Pro Asp Ser Glu Glu
 65 70 75 80
 Pro Ile Thr Glu Thr Ala Ser Pro Arg Lys Thr Glu Asp Ser Phe Tyr
 85 90 95
 Asn Asn Ser Tyr Asn Pro Phe Lys Glu Val Gln Thr Pro Gln Tyr Leu
 100 105 110
 Asn Pro Phe Asp Glu Pro Glu Ala Phe Val Thr Ile Lys Asp Ser Pro
 115 120 125
 Pro Gln Ser Thr Lys Arg Lys Asn Ile Arg Pro Val Asp Met Ser Lys
 130 135 140
 Tyr Leu Tyr Ala Asp Ser Ser Lys Thr Glu Glu Glu Glu Leu Asp Glu
 145 150 155 160
 Ser Asn Pro Phe Tyr Glu Pro Lys Ser Thr Pro Pro Pro Asn Asn Leu
 165 170 175
 Val Asn Pro Val Gln Glu Leu Glu Thr Glu Arg Arg Val Lys Arg Lys
 180 185 190
 Ala Pro Ala Pro Pro Val Leu Ser Pro Lys Thr Gly Val Leu Asn Glu
 195 200 205
 Asn Thr Val Ser Ala Gly Lys Asp Leu Ser Thr Ser Pro Lys Pro Ser
 210 215 220
 Pro Ile Pro Ser Pro Val Leu Gly Arg Lys Pro Asn Ala Ser Gln Ser
 225 230 235 240
 Leu Leu Val Trp Cys Lys Glu Val Thr Lys Asn Tyr Arg Gly Val Lys
 245 250 255
 Ile Thr Asn Phe Thr Thr Ser Trp Arg Asn Gly Leu Ser Phe Cys Ala
 260 265 270
 Ile Leu His His Phe Arg Pro Asp Leu Ile Asp Tyr Lys Ser Leu Asn
 275 280 285
 Pro Gln Asp Ile Lys Glu Asn Asn Lys Lys Ala Tyr Asp Gly Phe Ala
 290 295 300
 Ser Ile Gly Ile Ser Arg Leu Leu Glu Pro Ser Asp Met Val Leu Leu
 305 310 315 320
 Ala Ile Pro Asp Lys Leu Thr Val Met Thr Tyr Leu Tyr Gln Ile Arg
 325 330 335
 Ala His Phe Ser Gly Gln Glu Leu Asn Val Val Gln Ile Glu Glu Asn
 340 345 350
 Ser Ser Lys Ser Thr Tyr Lys Val Gly Asn Tyr Glu Thr Asp Thr Asn
 355 360 365
 Ser Ser Val Asp Gln Glu Lys Phe Tyr Ala Glu Leu Ser Asp Leu Lys
 370 375 380
 Arg Glu Pro Glu Leu Gln Gln Pro Ile Ser Gly Ala Val Asp Phe Leu
 385 390 395 400
 Ser Gln Asp Asp Ser Val Phe Val Asn Asp Ser Gly Val Gly Glu Ser
 405 410 415
 Glu Ser Glu His Gln Thr Pro Asp Asp His Leu Ser Pro Ser Thr Ala
 420 425 430
 Ser Pro Tyr Cys Arg Arg Thr Lys Ser Asp Thr Glu Pro Gln Lys Ser

435				440				445							
Gln	Gln	Ser	Ser	Gly	Arg	Thr	Ser	Gly	Ser	Asp	Asp	Pro	Gly	Ile	Cys
450				455				460							
Ser	Asn	Thr	Asp	Ser	Thr	Gln	Ala	Gln	Val	Leu	Leu	Gly	Lys	Lys	Arg
465				470				475				480			
Leu	Leu	Lys	Ala	Glu	Thr	Leu	Glu	Leu	Ser	Asp	Leu	Tyr	Val	Ser	Asp
485				490				495							
Lys	Lys	Lys	Asp	Met	Ser	Pro	Pro	Phe	Ile	Cys	Glu	Glu	Thr	Asp	Glu
500				505				510							
Gln	Lys	Leu	Gln	Thr	Leu	Asp	Ile	Gly	Ser	Asn	Leu	Glu	Lys	Glu	Lys
515				520				525							
Leu	Glu	Asn	Ser	Arg	Ser	Leu	Glu	Cys	Arg	Ser	Asp	Pro	Glu	Ser	Pro
530				535				540							
Ile	Lys	Lys	Thr	Ser	Leu	Ser	Pro	Thr	Ser	Lys	Leu	Gly	Tyr	Ser	Tyr
545				550				555				560			
Ser	Arg	Asp	Leu	Asp	Leu	Ala	Lys	Lys	Lys	His	Ala	Ser	Leu	Arg	Gln
565				570				575							
Thr	Glu	Ser	Asp	Pro	Asp	Ala	Asp	Arg	Thr	Thr	Leu	Asn	His	Ala	Asp
580				585				590							
His	Ser	Ser	Lys	Ile	Val	Gln	His	Arg	Leu	Leu	Ser	Arg	Gln	Glu	Glu
595				600				605							
Leu	Lys	Glu	Arg	Ala	Arg	Val	Leu	Leu	Glu	Gln	Ala	Arg	Arg	Asp	Ala
610				615				620							
Ala	Leu	Lys	Ala	Gly	Asn	Lys	His	Asn	Thr	Asn	Thr	Ala	Thr	Pro	Phe
625				630				635				640			
Cys	Asn	Arg	Gln	Leu	Ser	Asp	Gln	Gln	Asp	Glu	Glu	Arg	Arg	Arg	Gln
645				650				655							
Leu	Arg	Glu	Arg	Ala	Arg	Gln	Leu	Ile	Ala	Glu	Ala	Arg	Ser	Gly	Val
660				665				670							
Lys	Met	Ser	Glu	Leu	Pro	Ser	Tyr	Gly	Glu	Met	Ala	Ala	Glu	Lys	Leu
675				680				685							
Lys	Glu	Arg	Ser	Lys	Ala	Ser	Gly	Asp	Glu	Asn	Asp	Asn	Ile	Glu	Ile
690				695				700							
Asp	Thr	Asn	Glu	Glu	Ile	Pro	Glu	Gly	Phe	Val	Val	Gly	Gly	Gly	Asp
705				710				715				720			
Glu	Leu	Thr	Asn	Leu	Glu	Asn	Asp	Leu	Asp	Thr	Pro	Glu	Gln	Asn	Ser
725				730				735							
Lys	Leu	Val	Asp	Leu	Lys	Leu	Lys	Lys	Leu	Leu	Glu	Val	Gln	Pro	Gln
740				745				750							
Val	Ala	Asn	Ser	Pro	Ser	Ser	Ala	Ala	Gln	Lys	Ala	Val	Thr	Glu	Ser
755				760				765							
Ser	Glu	Gln	Asp	Met	Lys	Ser	Gly	Thr	Glu	Asp	Leu	Arg	Thr	Glu	Arg
770				775				780							
Leu	Gln	Lys	Thr	Thr	Glu	Arg	Phe	Arg	Asn	Pro	Val	Val	Phe	Ser	Lys
785				790				795				800			
Asp	Ser	Thr	Val	Arg	Lys	Thr	Gln	Leu	Gln	Ser	Phe	Ser	Gln	Tyr	Ile
805				810				815							
Glu	Asn	Arg	Pro	Glu	Met	Lys	Arg	Gln	Arg	Ser	Ile	Gln	Glu	Asp	Thr
820				825				830							
Lys	Lys	Gly	Asn	Glu	Glu	Lys	Ala	Ala	Ile	Thr	Glu	Thr	Gln	Arg	Lys
835				840				845							
Pro	Ser	Glu	Asp	Glu	Val	Leu	Asn	Lys	Gly	Phe	Lys	Asp	Ser	Ser	Gln
850				855				860							
Tyr	Val	Val	Gly	Glu	Leu	Ala	Ala	Leu	Glu	Asn	Glu	Gln	Lys	Gln	Ile
865				870				875				880			
Asp	Thr	Arg	Ala	Ala	Leu	Val	Glu	Lys	Arg	Leu	Arg	Tyr	Leu	Met	Asp
885				890				895							
Thr	Gly	Arg	Asn	Thr	Glu	Glu	Glu	Glu	Ala	Met	Met	Gln	Glu	Trp	Phe
900				905				910							
Met	Leu	Val	Asn	Lys	Lys	Asn	Ala	Leu	Ile	Arg	Arg	Met	Asn	Gln	Leu
915				920				925							
Ser	Leu	Glu	Lys	Glu	His	Asp	Leu	Glu	Arg	Arg	Tyr	Glu	Leu	Leu	
930				935				940							
Asn	Arg	Glu	Leu	Arg	Ala	Met	Leu	Ala	Ile	Glu	Asp	Trp	Gln	Lys	Thr

945 950 955 960
 Glu Ala Gln Lys Arg Arg Glu Gln Leu Leu Leu Asp Glu Leu Val Ala
 965 970 975
 Leu Val Asn Lys Arg Asp Ala Leu Val Arg Asp Leu Asp Ala Gln Glu
 980 985 990
 Lys Gln Ala Glu Glu Glu Asp Glu His Leu Glu Arg Thr Leu Glu Gln
 995 1000 1005
 Asn Lys Gly Lys Met Ala Lys Lys Glu Glu Lys Cys Val Leu Gln
 1010 1015 1020 1023

<210> 3420
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 3420
 Glu Asn Leu Gly Pro Asn Tyr Ser His Arg Leu Leu His His Pro Thr
 1 5 10 15
 Phe Tyr Lys Lys Ile His Lys Lys His His Glu Trp Thr Ala Pro Ile
 20 25 30
 Gly Val Ile Ser Leu Tyr Ala His Pro Ile Glu His Ala Val Ser Asn
 35 40 45
 Met Leu Pro Val Ile Val Gly Pro Leu Val Met Gly Ser His Leu Ser
 50 55 60
 Ser Ile Thr Met Trp Phe Ser Leu Ala Leu Ile Ile Thr Thr Ile Ser
 65 70 75 80
 His Cys Gly Tyr His Leu Pro Phe Leu Pro Ser Pro Glu Phe His Asp
 85 90 95
 Tyr His His Leu Lys Phe Asn Gln Cys Tyr Gly Val Leu Gly Val Leu
 100 105 110
 Asp His Leu His Gly Thr Asp Thr Met Phe Lys Gln Thr Lys Ala Tyr
 115 120 125
 Glu Arg His Val Leu Leu Leu Gly Phe Thr Pro Leu Ser Glu Ser Ile
 130 135 140
 Pro Asp Ser Pro Lys
 145 149

<210> 3421
 <211> 661
 <212> PRT
 <213> Homo sapiens

<400> 3421
 Leu Leu Thr Pro Cys Asp Gly Arg Ile Pro Gly Arg Pro Ser Val Gly
 1 5 10 15
 Ala Glu Ser Gly Ser Asp Phe Gln Gln Arg Arg Arg Arg Arg Asp
 20 25 30
 Pro Glu Glu Pro Glu Lys Thr Glu Leu Ser Glu Arg Glu Leu Ala Val
 35 40 45
 Ala Val Ala Val Ser Gln Glu Asn Asp Glu Glu Asn Glu Glu Arg Trp
 50 55 60
 Val Gly Pro Leu Pro Val Glu Ala Thr Leu Ala Lys Lys Arg Lys Val
 65 70 75 80
 Leu Glu Phe Glu Arg Val Tyr Leu Asp Asn Leu Pro Ser Ala Ser Met
 85 90 95
 Tyr Glu Arg Ser Tyr Met His Arg Asp Val Ile Thr His Val Val Cys
 100 105 110
 Thr Lys Thr Asp Phe Ile Ile Thr Ala Ser His Asp Gly His Val Lys

115	120	125
Phe Trp Lys Lys Ile Glu Glu Gly Ile Glu Phe Val Lys His Phe Arg		
130	135	140
Ser His Leu Gly Val Ile Glu Ser Ile Ala Val Ser Ser Glu Gly Ala		
145	150	155
Leu Phe Cys Ser Val Gly Asp Asp Lys Ala Met Lys Val Phe Asp Val		160
	165	170
Val Asn Phe Asp Met Ile Asn Met Leu Lys Leu Gly Tyr Phe Pro Gly		175
	180	185
Gln Cys Glu Trp Ile Tyr Cys Pro Gly Asp Ala Ile Ser Ser Val Ala		190
	195	200
Ala Ser Glu Lys Ser Thr Gly Lys Ile Phe Ile Tyr Asp Gly Arg Gly		205
	210	215
Asp Asn Gln Pro Leu His Ile Phe Asp Lys Leu His Thr Ser Pro Leu		220
225	230	235
Thr Gln Ile Arg Leu Asn Pro Val Tyr Lys Ala Val Val Ser Ser Asp		240
	245	250
Lys Ser Gly Met Ile Glu Tyr Trp Thr Gly Pro Pro His Glu Tyr Lys		255
	260	265
Phe Pro Lys Asn Val Asn Trp Glu Tyr Lys Thr Asp Thr Asp Leu Tyr		270
	275	280
Glu Phe Ala Lys Cys Lys Ala Tyr Pro Thr Ser Val Cys Phe Ser Pro		285
	290	295
Asp Gly Lys Lys Ile Ala Thr Ile Gly Ser Asp Arg Lys Val Arg Ile		300
305	310	315
Phe Arg Phe Val Thr Gly Lys Leu Met Arg Val Phe Asp Glu Ser Leu		320
	325	330
Ser Met Phe Thr Glu Leu Gln Gln Met Arg Gln Gln Leu Pro Asp Met		335
	340	345
Glu Phe Gly Arg Arg Met Ala Val Glu Arg Glu Leu Glu Lys Val Asp		350
	355	360
Ala Val Arg Leu Ile Asn Ile Val Phe Asp Glu Thr Gly His Phe Val		365
	370	375
Leu Tyr Gly Thr Met Leu Gly Ile Lys Val Ile Asn Val Glu Thr Asn		380
385	390	395
Arg Cys Val Arg Ile Leu Gly Lys Gln Glu Asn Ile Arg Val Met Gln		400
	405	410
Leu Ala Leu Phe Gln Gly Ile Ala Lys Lys His Arg Ala Ala Thr Thr		415
	420	425
Ile Glu Met Lys Ala Ser Glu Asn Pro Val Leu Gln Asn Ile Gln Ala		430
	435	440
Asp Pro Thr Ile Val Cys Thr Ser Phe Lys Lys Asn Arg Phe Tyr Met		445
	450	455
Phe Thr Lys Arg Glu Pro Glu Asp Thr Lys Ser Ala Asp Ser Asp Arg		460
465	470	475
Asp Val Phe Asn Glu Lys Pro Ser Lys Glu Glu Val Met Ala Ala Thr		480
	485	490
Gln Ala Glu Gly Pro Lys Arg Val Ser Asp Ser Ala Ile Ile His Thr		495
	500	505
Ser Met Gly Asp Ile His Thr Lys Leu Phe Pro Val Glu Cys Pro Lys		510
	515	520
Thr Val Glu Asn Phe Cys Val His Ser Arg Asn Gly Tyr Tyr Asn Gly		525
	530	535
His Thr Phe His Arg Ile Ile Lys Gly Phe Met Ile Gln Thr Gly Asp		540
545	550	555
Pro Thr Gly Thr Gly Met Gly Gly Glu Ser Ile Trp Gly Gly Glu Phe		560
	565	570
Glu Asp Glu Phe His Ser Thr Leu Arg His Asp Arg Pro Tyr Thr Leu		575
	580	585
Ser Met Ala Asn Ala Gly Ser Asn Thr Asn Gly Ser Gln Phe Phe Ile		590
	595	600
Thr Val Val Pro Thr Pro Trp Leu Asp Asn Lys His Thr Val Phe Gly		605
	610	615
Arg Val Thr Lys Gly Met Glu Val Val Gln Arg Ile Ser Asn Val Lys		620

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625          630          635          640
Val Asn Pro Lys Thr Asp Lys Pro Tyr Glu Asp Val Ser Ile Ile Asn
          645          650          655
Ile Thr Val Lys
          660

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<210> 3422
<211> 685
<212> PRT
<213> Homo sapiens
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<400> 3422															
Phe	Val	Leu	Val	Cys	Ala	Pro	Leu	Thr	Trp	Ala	Gly	Ala	Arg	His	Arg
1				5					10					15	
Arg	Met	Ala	Ala	Ser	Lys	Lys	Pro	Pro	Arg	Val	Arg	Val	Asn	His	Gln
			20					25					30		
Asp	Phe	Gln	Leu	Arg	Asn	Leu	Arg	Ile	Ile	Glu	Pro	Asn	Glu	Val	Thr
		35				40						45			
His	Ser	Gly	Asp	Thr	Gly	Val	Glu	Thr	Asp	Gly	Arg	Met	Pro	Pro	Lys
	50					55					60				
Val	Thr	Ser	Glu	Leu	Leu	Arg	Gln	Leu	Arg	Gln	Ala	Met	Arg	Asn	Ser
65					70					75					80
Glu	Tyr	Val	Thr	Glu	Pro	Ile	Gln	Ala	Tyr	Ile	Ile	Pro	Ser	Gly	Asp
				85					90					95	
Ala	His	Gln	Ser	Glu	Tyr	Ile	Ala	Pro	Cys	Asp	Cys	Arg	Arg	Ala	Phe
			100					105					110		
Val	Ser	Gly	Phe	Asp	Gly	Ser	Ala	Gly	Thr	Ala	Ile	Ile	Thr	Glu	Glu
		115					120					125			
His	Ala	Ala	Met	Trp	Thr	Asp	Gly	Arg	Tyr	Phe	Leu	Gln	Ala	Ala	Lys
	130					135					140				
Gln	Met	Asp	Ser	Asn	Trp	Thr	Leu	Met	Lys	Met	Gly	Leu	Lys	Asp	Thr
145				150						155					160
Pro	Thr	Gln	Glu	Asp	Trp	Leu	Val	Ser	Val	Leu	Pro	Glu	Gly	Ser	Arg
				165					170					175	
Val	Gly	Val	Asp	Pro	Leu	Ile	Ile	Pro	Thr	Asp	Tyr	Trp	Lys	Lys	Met
			180					185					190		
Ala	Lys	Val	Leu	Arg	Ser	Ala	Gly	His	His	Leu	Ile	Pro	Val	Lys	Glu
		195					200					205			
Asn	Leu	Val	Asp	Lys	Ile	Trp	Thr	Asp	Arg	Pro	Glu	Arg	Pro	Cys	Lys
	210					215					220				
Pro	Leu	Leu	Thr	Leu	Gly	Leu	Asp	Tyr	Thr	Gly	Ile	Ser	Trp	Lys	Asp
225				230						235					240
Lys	Val	Ala	Asp	Leu	Arg	Leu	Lys	Met	Ala	Glu	Arg	Asn	Val	Met	Trp
				245					250					255	
Phe	Val	Val	Thr	Ala	Leu	Asp	Glu	Ile	Ala	Trp	Leu	Phe	Asn	Leu	Arg
			260					265					270		
Gly	Ser	Asp	Val	Glu	His	Asn	Pro	Val	Phe	Phe	Ser	Tyr	Ala	Ile	Ile
		275				280						285			
Gly	Leu	Glu	Thr	Ile	Met	Leu	Phe	Ile	Asp	Gly	Asp	Arg	Ile	Asp	Ala
	290					295					300				
Pro	Ser	Val	Lys	Glu	His	Leu	Leu	Leu	Asp	Leu	Gly	Leu	Glu	Ala	Glu
305				310						315					320
Tyr	Arg	Ile	Gln	Val	His	Pro	Tyr	Lys	Ser	Ile	Leu	Ser	Glu	Leu	Lys
				325					330					335	

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385          390          395          400
Leu Cys Glu Leu Phe Asn Trp Leu Glu Lys Glu Val Pro Lys Gly Gly
          405          410          415
Val Thr Glu Ile Ser Ala Ala Asp Lys Ala Glu Glu Phe Arg Arg Gln
          420          425          430
Gln Ala Asp Phe Val Asp Leu Ser Phe Pro Thr Ile Ser Ser Thr Gly
          435          440          445
Pro Asn Gly Ala Ile Ile His Tyr Ala Pro Val Pro Glu Thr Asn Arg
          450          455          460
Thr Leu Ser Leu Asp Glu Val Tyr Leu Ile Asp Ser Gly Ala Gln Tyr
465          470          475          480
Lys Asp Gly Thr Thr Asp Val Thr Arg Thr Met His Phe Gly Thr Pro
          485          490          495
Thr Ala Tyr Glu Lys Glu Cys Phe Thr Tyr Val Leu Lys Gly His Ile
          500          505          510
Ala Val Ser Ala Ala Val Phe Pro Thr Gly Thr Lys Gly His Leu Leu
          515          520          525
Asp Ser Phe Ala Arg Ser Ala Leu Trp Asp Ser Gly Leu Asp Tyr Leu
530          535          540
His Gly Thr Gly His Gly Val Gly Ser Phe Leu Asn Val His Glu Gly
545          550          555          560
Pro Cys Gly Ile Ser Tyr Lys Thr Phe Ser Asp Glu Pro Leu Glu Ala
          565          570          575
Gly Met Ile Val Thr Asp Glu Pro Gly Tyr Tyr Glu Asp Gly Ala Phe
          580          585          590
Gly Ile Arg Ile Glu Asn Val Val Leu Val Val Pro Val Lys Thr Lys
          595          600          605
Tyr Asn Phe Asn Asn Arg Gly Ser Leu Thr Phe Glu Pro Leu Thr Leu
610          615          620
Val Pro Ile Gln Thr Lys Met Ile Asp Val Asp Ser Leu Thr Asp Lys
625          630          635          640
Glu Cys Asp Trp Leu Asn Asn Tyr His Leu Thr Cys Arg Asp Val Ile
          645          650          655
Gly Lys Glu Leu Gln Lys Gln Gly Arg Gln Glu Ala Leu Glu Trp Leu
          660          665          670
Ile Arg Glu Thr Gln Pro Ile Ser Lys Gln His
          675          680          683

```

<210> 3423
 <211> 1529
 <212> PRT
 <213> Homo sapiens

```

          <400> 3423
Phe Lys Met Pro Glu Asn Pro Ala Thr Asp Lys Leu Gln Val Leu Gln
 1          5          10          15
Val Leu Asp Arg Leu Lys Met Lys Leu Gln Glu Lys Gly Asp Thr Ser
          20          25          30
Gln Asn Glu Lys Leu Ser Met Phe Tyr Glu Thr Leu Lys Ser Pro Leu
          35          40          45
Phe Asn Gln Ile Leu Thr Leu Gln Gln Ser Ile Lys Gln Leu Lys Gly
          50          55          60
Gln Leu Asn His Ile Pro Ser Asp Cys Ser Ala Asn Phe Asp Phe Ser
          65          70          75          80
Arg Lys Gly Leu Leu Val Phe Thr Asp Gly Ser Ile Thr Asn Gly Asn
          85          90          95
Val His Arg Pro Ser Asn Asn Ser Thr Val Ser Gly Leu Phe Pro Trp
          100          105          110
Thr Pro Lys Leu Gly Asn Glu Asp Phe Asn Ser Val Ile Gln Gln Met
          115          120          125
Ala Gln Gly Arg Gln Ile Glu Tyr Ile Asp Ile Glu Arg Pro Ser Thr

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130	135	140
Gly Gly Leu Gly Phe Ser Val Val Ala Leu Arg Ser Gln Asn Leu Gly		
145	150	155
Lys Val Asp Ile Phe Val Lys Asp Val Gln Pro Gly Ser Val Ala Asp		160
	165	170
Arg Asp Gln Arg Leu Lys Glu Asn Asp Gln Ile Leu Ala Ile Asn His		175
	180	185
Thr Pro Leu Asp Gln Asn Ile Ser His Gln Gln Ala Ile Ala Leu Leu		190
	195	200
Gln Gln Thr Thr Gly Ser Leu Arg Leu Ile Val Ala Arg Glu Pro Val		205
	210	215
His Thr Lys Ser Ser Thr Ser Ser Ser Leu Asn Asp Thr Thr Leu Pro		220
225	230	235
Glu Thr Val Cys Trp Gly His Val Glu Glu Val Glu Leu Ile Asn Asp		240
	245	250
Gly Ser Gly Leu Gly Phe Gly Ile Val Gly Gly Lys Thr Ser Gly Val		255
	260	265
Val Val Arg Thr Ile Val Pro Gly Gly Leu Ala Asp Arg Asp Gly Arg		270
	275	280
Leu Gln Thr Gly Asp His Ile Leu Lys Ile Gly Gly Thr Asn Val Gln		285
	290	295
Gly Met Thr Ser Glu Gln Val Ala Gln Val Leu Arg Asn Cys Gly Asn		300
305	310	315
Ser Val Arg Met Leu Val Ala Arg Asp Pro Ala Gly Asp Ile Ser Val		320
	325	330
Thr Pro Pro Ala Pro Ala Ala Leu Pro Val Ala Leu Pro Thr Val Ala		335
	340	345
Ser Lys Gly Pro Gly Ser Asp Ser Ser Leu Phe Glu Thr Tyr Asn Val		350
	355	360
Glu Leu Val Arg Lys Asp Gly Gln Ser Leu Gly Ile Arg Ile Val Gly		365
	370	375
Tyr Val Gly Thr Ser His Thr Gly Glu Ala Ser Gly Ile Tyr Val Lys		380
385	390	395
Ser Ile Ile Pro Gly Ser Ala Ala Tyr His Asn Gly His Ile Gln Val		400
	405	410
Asn Asp Lys Ile Val Ala Val Asp Gly Val Asn Ile Gln Gly Phe Ala		415
	420	425
Asn His Asp Val Val Glu Val Leu Arg Asn Ala Gly Gln Val Val His		430
	435	440
Leu Thr Leu Val Arg Arg Lys Thr Ser Ser Ser Thr Ser Pro Leu Glu		445
	450	455
Pro Pro Ser Asp Arg Gly Thr Val Val Glu Pro Leu Lys Pro Pro Ala		460
465	470	475
Leu Phe Leu Thr Gly Ala Val Glu Thr Glu Thr Asn Val Asp Gly Glu		480
	485	490
Asp Glu Glu Ile Lys Glu Arg Ile Asp Thr Leu Lys Asn Asp Asn Ile		495
	500	505
Gln Ala Leu Glu Lys Leu Glu Lys Val Pro Asp Ser Pro Glu Asn Glu		510
	515	520
Leu Lys Ser Arg Trp Glu Asn Leu Leu Gly Pro Asp Tyr Glu Val Met		525
	530	535
Val Ala Thr Leu Asp Thr Gln Ile Ala Asp Asp Ala Glu Leu Gln Lys		540
545	550	555
Tyr Ser Lys Leu Leu Pro Ile His Thr Leu Arg Leu Gly Val Glu Val		560
	565	570
Asp Ser Phe Asp Gly His His Tyr Ile Ser Ser Ile Val Ser Gly Gly		575
	580	585
Pro Val Asp Thr Leu Gly Leu Leu Gln Pro Glu Asp Glu Leu Leu Glu		590
	595	600
Val Asn Gly Met Gln Leu Tyr Gly Lys Ser Arg Arg Glu Ala Val Ser		605
	610	615
Phe Leu Lys Glu Val Pro Pro Phe Thr Leu Val Cys Cys Arg Arg		620
625	630	635
Leu Phe Asp Asp Glu Ala Ser Val Asp Glu Pro Arg Arg Thr Glu Thr		640

				645					650				655		
Ser	Leu	Pro	Glu	Thr	Glu	Val	Asp	His	Asn	Met	Asp	Val	Asn	Thr	Glu
			660					665					670		
Glu	Asp	Asp	Asp	Gly	Glu	Leu	Ala	Leu	Trp	Ser	Pro	Glu	Val	Lys	Ile
		675					680					685			
Val	Glu	Leu	Val	Lys	Asp	Cys	Lys	Gly	Leu	Gly	Phe	Ser	Ile	Leu	Asp
	690					695					700				
Tyr	Gln	Asp	Pro	Leu	Asp	Pro	Thr	Arg	Ser	Val	Ile	Val	Ile	Arg	Ser
705					710					715				720	
Leu	Val	Ala	Asp	Gly	Val	Ala	Glu	Arg	Ser	Gly	Gly	Leu	Leu	Pro	Gly
			725					730						735	
Asp	Arg	Leu	Val	Ser	Val	Asn	Glu	Tyr	Cys	Leu	Asp	Asn	Thr	Ser	Leu
		740						745					750		
Ala	Glu	Ala	Val	Glu	Ile	Leu	Lys	Ala	Val	Pro	Pro	Gly	Leu	Val	His
	755						760					765			
Leu	Gly	Ile	Cys	Lys	Pro	Leu	Val	Glu	Asp	Asn	Glu	Glu	Glu	Ser	Cys
	770					775					780				
Tyr	Ile	Leu	His	Ser	Ser	Ser	Asn	Glu	Asp	Lys	Thr	Glu	Phe	Ser	Gly
785					790					795				800	
Thr	Ile	His	Asp	Ile	Asn	Ser	Ser	Leu	Ile	Leu	Glu	Ala	Pro	Lys	Gly
			805						810					815	
Phe	Arg	Asp	Glu	Pro	Tyr	Phe	Lys	Glu	Glu	Leu	Val	Asp	Glu	Pro	Phe
		820						825					830		
Leu	Asp	Leu	Gly	Lys	Ser	Phe	His	Ser	Gln	Gln	Lys	Glu	Ile	Glu	Gln
	835						840					845			
Ser	Lys	Glu	Ala	Trp	Glu	Met	His	Glu	Phe	Leu	Thr	Pro	Arg	Leu	Gln
	850					855					860				
Glu	Met	Asp	Glu	Glu	Arg	Glu	Met	Leu	Val	Asp	Glu	Glu	Tyr	Glu	Leu
865					870					875				880	
Tyr	Gln	Asp	Pro	Ser	Pro	Ser	Met	Glu	Leu	Tyr	Pro	Leu	Ser	His	Ile
			885						890					895	
Gln	Glu	Ala	Thr	Pro	Val	Pro	Ser	Val	Asn	Glu	Leu	His	Phe	Gly	Thr
		900						905					910		
Gln	Trp	Leu	His	Asp	Asn	Glu	Pro	Ser	Glu	Ser	Gln	Glu	Ala	Arg	Thr
	915						920					925			
Gly	Arg	Thr	Val	Tyr	Ser	Gln	Glu	Ala	Gln	Pro	Tyr	Gly	Tyr	Cys	Pro
	930					935					940				
Glu	Asn	Val	Met	Lys	Glu	Asn	Phe	Val	Met	Glu	Ser	Leu	Pro	Ser	Val
945					950					955				960	
Pro	Ser	Thr	Glu	Gly	Asn	Ser	Gln	Gln	Gly	Arg	Phe	Asp	Asp	Leu	Glu
			965						970					975	
Asn	Leu	Asn	Ser	Leu	Ala	Lys	Thr	Ser	Leu	Asp	Leu	Gly	Met	Ile	Pro
		980						985					990		
Asn	Asp	Val	Gln	Gly	Pro	Ser	Leu	Leu	Ile	Asp	Leu	Pro	Val	Val	Ala
	995					1000						1005			
Gln	Arg	Arg	Glu	Gln	Glu	Asp	Leu	Pro	Leu	Tyr	Gln	His	Gln	Ala	Thr
	1010					1015						1020			
Arg	Val	Ile	Ser	Lys	Ala	Ser	Ala	Tyr	Thr	Gly	Met	Leu	Ser	Ser	Arg
1025				1030						1035				1040	
Tyr	Ala	Thr	Asp	Thr	Cys	Glu	Leu	Pro	Glu	Arg	Glu	Glu	Gly	Glu	Gly
			1045						1050					1055	
Glu	Glu	Thr	Pro	Asn	Phe	Ser	His	Trp	Gly	Pro	Pro	Arg	Ile	Val	Glu
		1060						1065					1070		
Ile	Phe	Arg	Glu	Pro	Asn	Val	Ser	Leu	Gly	Ile	Ser	Ile	Val	Gly	Gly
	1075						1080					1085			
Gln	Thr	Val	Ile	Lys	Arg	Leu	Lys	Asn	Gly	Glu	Glu	Leu	Lys	Gly	Ile
	1090					1095						1100			
Phe	Ile	Lys	Gln	Val	Leu	Glu	Asp	Ser	Pro	Ala	Gly	Lys	Thr	Asn	Ala
1105				1110						1115				1120	
Leu	Lys	Thr	Gly	Asp	Lys	Ile	Leu	Glu	Val	Ser	Gly	Val	Asp	Leu	Gln
			1125						1130					1135	
Asn	Ala	Ser	His	Ser	Glu	Ala	Val	Glu	Ala	Ile	Lys	Asn	Ala	Gly	Asn
	1140							1145					1150		
Pro	Val	Val	Phe	Ile	Val	Gln	Ser	Leu	Ser	Ser	Thr	Pro	Arg	Val	Ile

1155 1160 1165
 Pro Asn Val His Asn Lys Ala Asn Lys Ile Thr Gly Asn Gln Asn Gln
 1170 1175 1180
 Asp Thr Gln Glu Lys Lys Glu Lys Arg Gln Gly Thr Ala Pro Pro Pro
 1185 1190 1195 1200
 Met Lys Leu Pro Pro Pro Tyr Lys Ala Leu Thr Asp Asp Ser Asp Glu
 1205 1210 1215
 Asn Glu Glu Glu Asp Ala Phe Thr Asp Gln Lys Ile Arg Gln Arg Tyr
 1220 1225 1230
 Ala Asp Leu Pro Gly Glu Leu His Ile Ile Glu Leu Glu Lys Asp Lys
 1235 1240 1245
 Asn Gly Leu Gly Leu Ser Leu Ala Gly Asn Lys Asp Arg Ser Arg Met
 1250 1255 1260
 Ser Ile Phe Val Val Gly Ile Asn Pro Glu Gly Pro Ala Ala Ala Asp
 1265 1270 1275 1280
 Gly Arg Met His Ile Gly Asp Glu Leu Leu Glu Ile Asn Asn Gln Ile
 1285 1290 1295
 Leu Tyr Gly Arg Ser His Gln Asn Ala Ser Ala Ile Ile Lys Thr Ala
 1300 1305 1310
 Pro Ser Lys Val Lys Leu Val Phe Ile Arg Asn Glu Asp Ala Val Asn
 1315 1320 1325
 Gln Met Ala Val Thr Pro Phe Pro Val Pro Ser Ser Ser Pro Ser Ser
 1330 1335 1340
 Ile Glu Asp Gln Ser Gly Thr Glu Pro Ile Ser Ser Glu Glu Asp Gly
 1345 1350 1355 1360
 Ser Leu Glu Val Gly Ile Lys Gln Leu Pro Glu Ser Glu Ser Phe Lys
 1365 1370 1375
 Leu Ala Val Ser Gln Met Lys Gln Gln Lys Tyr Pro Thr Lys Val Ser
 1380 1385 1390
 Phe Ser Ser Gln Glu Ile Pro Leu Ala Pro Ala Ser Ser Tyr His Ser
 1395 1400 1405
 Thr Asp Ala Asp Phe Thr Gly Tyr Gly Gly Phe Gln Ala Pro Leu Ser
 1410 1415 1420
 Val Asp Pro Ala Thr Cys Pro Ile Val Pro Gly Gln Glu Met Ile Ile
 1425 1430 1435 1440
 Glu Ile Ser Lys Arg Arg Ser Gly Leu Gly Leu Ser Ile Val Gly Gly
 1445 1450 1455
 Lys Asp Thr Pro Leu Val Asn Gly Val Asp Leu Arg Asn Ser Ser His
 1460 1465 1470
 Glu Glu Ala Ile Thr Ala Leu Arg Gln Thr Pro Gln Lys Val Arg Leu
 1475 1480 1485
 Val Val Tyr Arg Asp Glu Ala His Tyr Arg Asp Glu Glu Asn Leu Glu
 1490 1495 1500
 Ile Phe Pro Val Asp Leu Gln Lys Lys Ala Gly Arg Gly Leu Gly Leu
 1505 1510 1515 1520
 Ser Ile Val Gly Lys Arg
 1525 1526

<210> 3424
 <211> 359
 <212> PRT
 <213> Homo sapiens

<400> 3424
 His Ala Ser Glu Arg Val Val Gln Leu Pro Asp Phe Val Trp Asp Gln
 1 5 10 15
 Tyr Thr His Ser Leu Gly Arg Val Glu Arg Glu Phe Lys Asn Arg Lys
 20 25 30
 Arg His Thr Arg Arg Val Lys Leu Val Phe Asp Lys Gly Leu Pro Ala
 35 40 45
 Arg Pro Lys Ser Pro Leu Asp Pro Lys Lys Asp Gly Glu Ser Leu Ser

50	55	60
Tyr Ser Met Leu Pro	Leu Ser Asp Gly Pro Glu Gly Ser Ser Ser Arg	
65	70	75
Pro Gln Met Ile Arg	Gly Arg Leu Cys Asp Asp Thr Lys Pro Glu Thr	80
	85	90
Phe Asn Gln Leu Trp	Thr Val Glu Glu Gln Lys Lys Leu Glu Gln Leu	95
	100	105
Leu Ile Lys Tyr Pro	Pro Glu Glu Val Glu Ser Arg Arg Trp Gln Lys	110
	115	120
Ile Ala Asp Glu Leu	Gly Asn Arg Thr Ala Lys Gln Val Ala Ser Arg	125
	130	135
Val Gln Lys Tyr Phe	Ile Lys Leu Thr Lys Ala Gly Ile Pro Val Pro	140
	145	150
Gly Arg Thr Pro Asn	Leu Tyr Ile Tyr Ser Lys Lys Ser Ser Thr Ser	155
	165	170
Arg Arg Gln His Pro	Leu Asn Lys His Leu Phe Lys Pro Gly Thr Phe	175
	180	185
Met Thr Ser His Glu	Pro Pro Val Tyr Met Asp Glu Asp Asp Asp Arg	190
	195	200
Ser Cys Phe His Ser	His Met Asn Thr Ala Val Glu Asp Ala Ser Asp	205
	210	215
Asp Glu Ser Ile Pro	Ile Met Tyr Arg Asn Leu Pro Glu Tyr Lys Glu	220
	225	230
Leu Leu Gln Phe Lys	Lys Leu Lys Lys Gln Lys Leu Gln His Met Gln	235
	245	250
Ala Glu Ser Gly Phe	Val Gln His Val Gly Phe Lys Cys Asp Asn Cys	255
	260	265
Gly Ile Glu Pro Ile	Gln Gly Val Arg Trp His Cys Arg Asp Cys Pro	270
	275	280
Pro Glu Met Ser Leu	Asp Phe Cys Asp Ser Cys Ser Asp Cys Leu His	285
	290	295
Glu Thr Asp Ile His	Lys Gly Asp His Gln Leu Glu Pro Ile Tyr Arg	300
	305	310
Ser Glu Thr Phe Leu	Asp Arg Asp Tyr Cys Val Ser Gln Gly Thr Ser	315
	325	330
Tyr Asn Tyr Leu Asp	Pro Asn Tyr Phe Pro Ala Asn Arg	335
	340	345
		349

<210> 3425

<211> 359

<212> PRT

<213> Homo sapiens

<400> 3425

His Ala Ser Glu Arg	Val Val Gln Leu Pro Asp Phe Val Trp Asp Gln
1	5
Tyr Thr His Ser Leu	Gly Arg Val Glu Arg Glu Phe Lys Asn Arg Lys
	20
Arg His Thr Arg Arg	Val Lys Leu Val Phe Asp Lys Gly Leu Pro Ala
	35
Arg Pro Lys Ser Pro	Leu Asp Pro Lys Lys Asp Gly Glu Ser Leu Ser
	50
Tyr Ser Met Leu Pro	Leu Ser Asp Gly Pro Glu Gly Ser Ser Ser Arg
	65
Pro Gln Met Ile Arg	Gly Arg Leu Cys Asp Asp Thr Lys Pro Glu Thr
	85
Phe Asn Gln Leu Trp	Thr Val Glu Glu Gln Lys Lys Leu Glu Gln Leu
	100
Leu Ile Lys Tyr Pro	Pro Glu Glu Val Glu Ser Arg Arg Trp Gln Lys
	115
Ile Ala Asp Glu Leu	Gly Asn Arg Thr Ala Lys Gln Val Ala Ser Arg
	120
	125

130	135	140
Val Gln Lys Tyr Phe Ile	Lys Leu Thr Lys Ala Gly Ile Pro Val Pro	
145	150	155
Gly Arg Thr Pro Asn Leu Tyr Ile Tyr Ser Lys Lys Ser Ser Thr Ser		160
	165	170
Arg Arg Gln His Pro Leu Asn Lys His Leu Phe Lys Pro Gly Thr Phe		175
	180	185
Met Thr Ser His Glu Pro Pro Val Tyr Met Asp Glu Asp Asp Asp Arg		190
	195	200
Ser Cys Phe His Ser His Met Asn Thr Ala Val Glu Asp Ala Ser Asp		205
	210	215
Asp Glu Ser Ile Pro Ile Met Tyr Arg Asn Leu Pro Glu Tyr Lys Glu		220
225	230	235
Leu Leu Gln Phe Lys Lys Leu Lys Lys Gln Lys Leu Gln His Met Gln		240
	245	250
Ala Glu Ser Gly Phe Val Gln His Val Gly Phe Lys Cys Asp Asn Cys		255
	260	265
Gly Ile Glu Pro Ile Gln Gly Val Arg Trp His Cys Arg Asp Cys Pro		270
	275	280
Pro Glu Met Ser Leu Asp Phe Cys Asp Ser Cys Ser Asp Cys Leu His		285
	290	295
Glu Thr Asp Ile His Lys Gly Asp His Gln Leu Glu Pro Ile Tyr Arg		300
305	310	315
Ser Glu Thr Phe Leu Asp Arg Asp Tyr Cys Val Ser Gln Gly Thr Ser		320
	325	330
Tyr Asn Tyr Leu Asp Pro Asn Tyr Phe Pro Ala Asn Arg		335
	340	345
		349

<210> 3426

<211> 518

<212> PRT

<213> Homo sapiens

<400> 3426

Leu Phe Val Val Val His Asp Asp Pro Arg Trp Gly Thr Pro Arg Tyr	
1	5
Trp Leu Gly Ala Leu Tyr Arg Asn Gln Ser Ser Pro Thr Ala Pro	10
	20
Pro Gly Leu Leu Pro Leu Glu Tyr Phe Pro Ala Ala Pro His Cys Ser	25
	30
His Ser Arg Gln Trp Arg Cys Ser Gln Thr His Arg Ile His His His	35
	40
Pro Gln Met Leu Gly Pro Cys Arg Gln Glu Ile Cys Gly Ile Thr Met	45
	50
Ala Ala Gly Thr Leu Tyr Thr Tyr Pro Glu Asn Trp Arg Ala Phe Lys	55
	60
Ala Leu Ile Ala Ala Gln Tyr Ser Gly Ala Gln Val Arg Val Leu Ser	65
	70
Ala Pro Pro His Phe His Phe Gly Gln Thr Asn Arg Thr Pro Glu Phe	75
	80
Leu Arg Lys Phe Pro Ala Gly Lys Val Pro Ala Phe Glu Gly Asp Asp	85
	90
Gly Phe Cys Val Phe Glu Ser Asn Ala Ile Ala Tyr Tyr Val Ser Asn	95
	100
Glu Glu Leu Arg Gly Ser Thr Pro Glu Ala Ala Ala Gln Val Val Gln	105
	110
Trp Val Ser Phe Ala Asp Ser Asp Ile Val Pro Pro Ala Ser Thr Trp	115
	120
Val Phe Pro Thr Leu Gly Ile Met His His Asn Lys Gln Ala Thr Glu	125
	130
Asn Ala Lys Glu Glu Val Arg Arg Ile Leu Gly Leu Leu Asp Ala Tyr	135
	140
	145
	150
	155
	160
	165
	170
	175
	180
	185
	190
	195
	200
	205

210	215	220
Leu Lys Thr Arg Thr Phe	Leu Val Gly Glu Arg Val Thr Leu Ala Asp	
225	230	235
Ile Thr Val Val Cys Thr	Leu Leu Trp Leu Tyr Lys Gln Val Leu Glu	240
	245	250
Pro Ser Phe Arg Gln Ala Phe	Pro Asn Thr Asn Arg Trp Phe Leu Thr	255
	260	265
Cys Ile Asn Gln Pro Gln Phe	Arg Ala Val Phe Gly Glu Val Lys Leu	270
	275	280
Cys Glu Lys Met Ala Gln Phe	Asp Ala Lys Lys Phe Ala Glu Thr Gln	285
	290	295
Pro Lys Lys Asp Thr Pro	Arg Lys Glu Lys Gly Ser Arg Glu Glu Lys	300
305	310	315
Gln Lys Pro Gln Ala Glu	Arg Lys Glu Glu Lys Lys Ala Ala Ala Pro	320
	325	330
Ala Pro Glu Glu Glu Met	Asp Glu Cys Glu Gln Ala Leu Ala Ala Glu	335
	340	345
Pro Lys Ala Lys Asp Pro	Phe Ala His Leu Pro Lys Ser Thr Phe Val	350
	355	360
Leu Asp Glu Phe Lys Arg	Lys Tyr Ser Asn Glu Asp Thr Leu Ser Val	365
	370	375
Ala Leu Pro Tyr Phe Trp	Glu His Phe Asp Lys Asp Gly Trp Ser Leu	380
385	390	395
Trp Tyr Ser Glu Tyr Arg	Phe Pro Glu Glu Leu Thr Gln Thr Phe Met	400
	405	410
Ser Cys Asn Leu Ile Thr	Gly Met Phe Gln Arg Leu Asp Lys Leu Arg	415
	420	425
Lys Asn Ala Phe Ala Ser	Val Ile Leu Phe Gly Thr Asn Asn Ser Ser	430
	435	440
Ser Ile Ser Gly Val Trp	Val Phe Arg Gly Gln Glu Leu Ala Phe Pro	445
	450	455
Leu Ser Pro Asp Trp Gln	Val Asp Tyr Glu Ser Tyr Thr Trp Arg Lys	460
465	470	475
Leu Asp Pro Gly Ser Glu	Glu Thr Gln Thr Leu Val Arg Glu Tyr Phe	480
	485	490
Ser Trp Glu Gly Ala Phe	Gln His Val Gly Lys Ala Phe Asn Gln Gly	495
	500	505
Lys Ile Phe Lys		510
515	516	

<210> 3427
 <211> 235
 <212> PRT
 <213> Homo sapiens

<400> 3427
 Thr Ala Ala Arg Arg Arg Gln Lys Gly Thr Ala Ala Arg Arg Arg Gln
 1 5 10 15
 Lys Gly Thr Ala Ala Arg Arg Arg Gln Lys Gly Thr Ala Ala Arg Arg
 20 25 30
 Arg Gln Lys Gly Thr Ala Ala Arg Arg Gln Lys Gly Thr Ala Ala
 35 40 45
 Arg Arg Arg Gln Lys Gly Thr Ala Ala Arg Arg Arg Gln Lys Gly Thr
 50 55 60
 Ala Ala Arg Arg Arg Gln Lys Gly Thr Ala Ala Arg Arg Arg Gln Lys
 65 70 75 80
 Gly Thr Ala Ala Arg Arg Arg Gln Lys Gly Thr Ala Ala Arg Arg Arg
 85 90 95
 Gln Lys Gly Leu Ser Asn Leu Asp Ala Ala Glu Trp Leu Pro Pro Lys
 100 105 110
 Lys Gly Gly Glu Lys Lys Lys Gly Pro Phe Leu Ala Ile Asn Glu Val

115	120	125
Val Thr Arg Glu Tyr Pro Ile Asn Ile Leu Lys Arg Ile His Gly Val		
130	135	140
Gly Phe Lys Lys Arg Ala Pro Arg Ala Leu Lys Glu Ile Arg Lys Phe		
145	150	155
Ala Met Lys Glu Met Gly Thr Pro Asp Val Arg Ile Asp Thr Arg Leu		
165	170	175
Asn Lys Ala Val Trp Ala Lys Gly Ile Arg Asn Val Pro Tyr Arg Ile		
180	185	190
Arg Val Arg Leu Ser Arg Lys Arg Asn Glu Asp Glu Asp Ser Pro Asn		
195	200	205
Lys Leu Tyr Thr Leu Val Thr Tyr Val Pro Val Thr Thr Phe Lys Asn		
210	215	220
Leu Gln Thr Val Asn Val Asp Glu Asn		
225	230	233

<210> 3428
 <211> 646
 <212> PRT
 <213> Homo sapiens

<400> 3428

Leu Pro Leu Ser Leu Ser Phe Ser Glu Met Pro Leu Pro Leu Leu Pro		
1	5	10
Met Asp Leu Lys Gly Glu Pro Gly Pro Pro Gly Lys Pro Gly Pro Trp		
20	25	30
Gly Pro Pro Gly Pro Pro Gly Phe Pro Gly Lys Pro Gly His Gly Lys		
35	40	45
Pro Gly Leu His Gly Gln Pro Gly Pro Ala Gly Pro Pro Gly Phe Ser		
50	55	60
Arg Met Gly Lys Ala Gly Pro Pro Gly Leu Pro Gly Asn Val Gly Pro		
65	70	75
Pro Gly Gln Pro Gly Leu Arg Gly Glu Pro Gly Ile Arg Gly Asp Gln		
85	90	95
Gly Leu Arg Gly Pro Pro Gly Pro Pro Gly Leu Pro Gly Pro Ser Gly		
100	105	110
Ile Thr Ile Pro Gly Lys Pro Gly Ala Gln Gly Val Pro Gly Pro Pro		
115	120	125
Gly Phe Gln Gly Glu Pro Gly Pro Gln Gly Glu Pro Gly Pro Pro Gly		
130	135	140
Asp Arg Gly Leu Lys Gly Asp Asn Gly Val Gly Gln Pro Gly Leu Pro		
145	150	155
Gly Ala Pro Gly Gln Gly Gly Ala Pro Gly Pro Pro Gly Leu Pro Gly		
165	170	175
Pro Ala Gly Leu Gly Lys Pro Gly Leu Asp Gly Leu Pro Gly Ala Pro		
180	185	190
Gly Asp Lys Gly Glu Ser Gly Pro Pro Gly Val Pro Gly Pro Arg Gly		
195	200	205
Glu Pro Gly Ala Val Gly Pro Lys Gly Pro Pro Gly Val Asp Gly Val		
210	215	220
Gly Val Pro Gly Ala Ala Gly Leu Pro Gly Pro Gln Gly Pro Ser Gly		
225	230	235
Ala Lys Gly Glu Pro Gly Thr Arg Gly Pro Pro Gly Leu Ile Gly Pro		
245	250	255
Thr Gly Tyr Gly Met Pro Gly Leu Pro Gly Pro Lys Gly Asp Arg Gly		
260	265	270
Pro Ala Gly Val Pro Gly Leu Leu Gly Asp Arg Gly Glu Pro Gly Glu		
275	280	285
Asp Gly Glu Pro Gly Glu Gln Gly Pro Gln Gly Leu Gly Gly Pro Pro		
290	295	300
Gly Leu Pro Gly Ser Ala Gly Leu Pro Gly Arg Arg Gly Pro Pro Gly		

305 310 315 320
 Pro Lys Gly Glu Ala Gly Pro Gly Gly Pro Pro Gly Val Pro Gly Ile
 325 330 335
 Arg Gly Asp Gln Gly Pro Ser Gly Leu Ala Gly Lys Pro Gly Val Pro
 340 345 350
 Gly Glu Arg Gly Leu Pro Gly Ala His Gly Pro Pro Gly Pro Thr Gly
 355 360 365
 Pro Lys Gly Glu Pro Gly Phe Thr Gly Arg Pro Gly Gly Pro Gly Val
 370 375 380
 Ala Gly Ala Leu Gly Gln Lys Gly Asp Leu Gly Leu Pro Gly Gln Pro
 385 390 395 400
 Gly Leu Arg Gly Pro Ser Gly Ile Pro Gly Leu Gln Gly Pro Ala Gly
 405 410 415
 Pro Ile Gly Pro Gln Gly Leu Pro Gly Leu Lys Gly Glu Pro Gly Leu
 420 425 430
 Pro Gly Pro Pro Gly Glu Gly Arg Ala Gly Glu Pro Gly Thr Ala Gly
 435 440 445
 Pro Arg Gly Pro Pro Gly Val Pro Gly Ser Pro Gly Ile Thr Gly Pro
 450 455 460
 Pro Gly Leu Pro Gly Pro Gly Ala Pro Gly Ala Phe Asp Glu Thr
 465 470 475 480
 Gly Ile Ala Gly Leu His Leu Pro Asn Gly Gly Val Glu Gly Ala Val
 485 490 495
 Leu Gly Lys Gly Gly Lys Pro Gln Phe Gly Leu Gly Glu Leu Ser Ala
 500 505 510
 His Ala Thr Pro Ala Phe Thr Ala Val Leu Thr Ser Pro Leu Pro Ala
 515 520 525
 Ser Gly Met Pro Val Lys Phe Asp Arg Thr Leu Tyr Asn Gly His Ser
 530 535 540
 Gly Tyr Asn Pro Ala Thr Gly Ile Phe Thr Cys Pro Val Gly Gly Val
 545 550 555 560
 Tyr Tyr Phe Ala Tyr His Val His Val Lys Gly Thr Asn Val Trp Val
 565 570 575
 Ala Leu Tyr Lys Asn Asn Val Pro Ala Thr Tyr Thr Tyr Asp Glu Tyr
 580 585 590
 Lys Lys Gly Tyr Leu Asp Gln Ala Ser Gly Gly Ala Val Leu Gln Leu
 595 600 605
 Arg Pro Asn Asp Gln Val Trp Val Gln Met Pro Ser Asp Gln Ala Asn
 610 615 620
 Gly Leu Tyr Ser Thr Glu Tyr Ile His Ser Ser Phe Ser Gly Phe Leu
 625 630 635 640
 Leu Cys Pro Thr
 644

<210> 3429
 <211> 288
 <212> PRT
 <213> Homo sapiens

<400> 3429
 Glu Gly Leu Thr Gly Pro Cys Glu Arg Val Pro Phe Leu Leu Gly Arg
 1 5 10 15
 Gly Pro Pro His Gly Ala Thr Arg Ala Gly His Arg Arg Ala Val Arg
 20 25 30
 Trp Ala Gly Pro Glu Ser Leu Pro Pro Leu Pro Arg Ser Leu Ile Met
 35 40 45
 Asp Ser Pro Arg Ala Gly Thr His Gln Gly Pro Leu Asp Ala Glu Thr
 50 55 60
 Glu Val Gly Ala Asp Arg Cys Thr Ser Thr Ala Tyr Gln Glu Gln Arg
 65 70 75 80
 Pro Gln Val Glu Gln Val Gly Lys Gln Ala Pro Leu Ser Pro Gly Leu

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<210> 3430
<211> 403
<212> PRT
<213> Homo sapiens
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5119

225		230		235		240									
Arg	Trp	Cys	Arg	Asp	Tyr	Arg	Val	Pro	Phe	Lys	Ile	Asn	Ser	Val	Ile
				245					250					255	
Asn	Pro	Phe	Asn	Val	Glu	Glu	Asp	Met	Thr	Glu	Gln	Ile	Lys	Ala	Leu
			260					265					270		
Asn	Pro	Val	Arg	Trp	Lys	Val	Phe	Gln	Cys	Leu	Leu	Ile	Glu	Gly	Glu
		275					280					285			
Asn	Cys	Gly	Glu	Asp	Ala	Leu	Arg	Glu	Ala	Glu	Arg	Phe	Val	Ile	Gly
	290					295				300					
Asp	Glu	Glu	Phe	Glu	Arg	Phe	Leu	Glu	Arg	His	Lys	Glu	Val	Ser	Cys
	305				310					315				320	
Leu	Val	Pro	Glu	Ser	Asn	Gln	Lys	Met	Lys	Asp	Ser	Tyr	Leu	Ile	Leu
				325					330				335		
Asp	Glu	Tyr	Met	Arg	Phe	Leu	Asn	Cys	Arg	Lys	Gly	Arg	Lys	Asp	Pro
			340					345					350		
Ser	Lys	Ser	Ile	Leu	Asp	Val	Gly	Val	Glu	Glu	Ala	Ile	Lys	Phe	Ser
		355					360					365			
Gly	Phe	Asp	Glu	Lys	Met	Phe	Leu	Lys	Arg	Gly	Gly	Lys	Tyr	Ile	Trp
	370					375					380				
Ser	Lys	Ala	Asp	Leu	Lys	Leu	Asp	Trp							
	385				390			393							

<210> 3431

<211> 1109

<212> PRT

<213> Homo sapiens

<400> 3431

Ala	Cys	Gly	Phe	Leu	Pro	Gly	Arg	Cys	His	Phe	Ser	Thr	Phe	Lys	Gln
1				5					10					15	
Cys	Gln	Glu	Trp	Leu	Ser	Arg	Leu	Ser	Arg	Ala	Thr	Ala	Arg	Pro	Ala
			20					25					30		
Lys	Pro	Glu	Asp	Leu	Phe	Ala	Phe	Ala	Tyr	His	Ala	Trp	Cys	Leu	Gly
		35					40					45			
Leu	Thr	Glu	Glu	Asp	Gln	His	Thr	His	Leu	Cys	Gln	Pro	Gly	Glu	His
	50					55					60				
Ile	Arg	Cys	Arg	Gln	Glu	Ala	Glu	Leu	Ala	Arg	Met	Gly	Phe	Asp	Leu
	65				70					75				80	
Gln	Asn	Val	Trp	Arg	Val	Ser	His	Ile	Asn	Ser	Asn	Tyr	Lys	Leu	Cys
				85					90					95	
Pro	Ser	Tyr	Pro	Gln	Lys	Leu	Leu	Val	Pro	Val	Trp	Ile	Thr	Asp	Lys
			100					105					110		
Glu	Leu	Glu	Asn	Val	Ala	Ser	Phe	Arg	Ser	Trp	Lys	Arg	Ile	Pro	Val
		115					120					125			
Val	Val	Tyr	Arg	His	Leu	Arg	Asn	Gly	Ala	Ala	Ile	Ala	Arg	Cys	Ser
	130					135					140				
Gln	Pro	Glu	Ile	Ser	Trp	Trp	Gly	Trp	Arg	Asn	Ala	Asp	Asp	Glu	Tyr
	145				150				155					160	
Leu	Val	Thr	Ser	Ile	Ala	Lys	Ala	Cys	Ala	Leu	Asp	Pro	Gly	Thr	Arg
			165					170						175	
Ala	Thr	Gly	Gly	Ser	Leu	Ser	Thr	Gly	Asn	Asn	Asp	Thr	Ser	Glu	Ala
		180						185					190		
Cys	Asp	Ala	Asp	Phe	Asp	Ser	Ser	Leu	Thr	Ala	Cys	Ser	Gly	Val	Glu
		195					200					205			
Ser	Thr	Ala	Ala	Pro	Gln	Lys	Leu	Leu	Ile	Leu	Asp	Ala	Arg	Ser	Tyr
	210					215					220				
Thr	Ala	Ala	Val	Ala	Asn	Arg	Ala	Lys	Gly	Gly	Gly	Cys	Glu	Cys	Glu
	225				230				235					240	
Glu	Tyr	Tyr	Pro	Asn	Cys	Glu	Val	Val	Phe	Met	Gly	Met	Ala	Asn	Ile
				245					250					255	
His	Ala	Ile	Arg	Asn	Ser	Phe	Gln	Tyr	Leu	Arg	Ala	Val	Cys	Ser	Gln

				260						265					270	
Met	Pro	Asp	Pro	Ser	Asn	Trp	Leu	Ser	Ala	Leu	Glu	Ser	Thr	Lys	Trp	
		275														
Leu	Gln	His	Leu	Ser	Val	Met	Leu	Lys	Ala	Ala	Val	Leu	Val	Ala	Asn	
		290				295					300					
Thr	Val	Asp	Arg	Glu	Gly	Arg	Pro	Val	Leu	Val	His	Cys	Ser	Asp	Gly	
305					310					315					320	
Trp	Asp	Arg	Thr	Pro	Gln	Ile	Val	Ala	Leu	Ala	Lys	Ile	Leu	Leu	Asp	
				325					330						335	
Pro	Tyr	Tyr	Arg	Thr	Leu	Glu	Gly	Phe	Gln	Val	Leu	Val	Glu	Ser	Asp	
			340					345						350		
Trp	Leu	Asp	Phe	Gly	His	Lys	Phe	Gly	Asp	Arg	Cys	Gly	His	Gln	Glu	
		355					360					365				
Asn	Val	Glu	Asp	Gln	Asn	Glu	Gln	Cys	Pro	Val	Phe	Leu	Gln	Trp	Leu	
		370				375					380					
Asp	Ser	Val	His	Gln	Leu	Leu	Lys	Gln	Phe	Pro	Cys	Leu	Phe	Glu	Phe	
385				390						395					400	
Asn	Glu	Ala	Phe	Leu	Val	Lys	Leu	Val	Gln	His	Thr	Tyr	Ser	Cys	Leu	
				405					410					415		
Tyr	Gly	Thr	Phe	Leu	Ala	Asn	Asn	Pro	Cys	Glu	Arg	Glu	Lys	Arg	Asn	
			420					425						430		
Ile	Tyr	Lys	Arg	Gly	Thr	Cys	Ser	Val	Trp	Ala	Leu	Leu	Arg	Ala	Gly	
		435						440					445			
Asn	Lys	Asn	Phe	His	Asn	Phe	Leu	Tyr	Thr	Pro	Ser	Ser	Asp	Met	Val	
		450				455					460					
Leu	His	Pro	Val	Cys	His	Val	Arg	Ala	Leu	His	Leu	Trp	Thr	Ala	Val	
465				470						475					480	
Tyr	Leu	Pro	Ala	Ser	Ser	Pro	Cys	Thr	Leu	Gly	Glu	Glu	Asn	Met	Asp	
				485					490					495		
Leu	Tyr	Leu	Ser	Pro	Val	Ala	Gln	Ser	Gln	Glu	Phe	Ser	Gly	Arg	Ser	
			500					505					510			
Leu	Asp	Arg	Leu	Pro	Lys	Thr	Arg	Ser	Met	Asp	Asp	Leu	Leu	Ser	Ala	
		515					520					525				
Cys	Asp	Thr	Ser	Ser	Pro	Leu	Thr	Arg	Thr	Ser	Ser	Asp	Pro	Asn	Leu	
		530				535						540				
Asn	Asn	His	Cys	Gln	Glu	Val	Arg	Val	Gly	Leu	Glu	Pro	Trp	His	Ser	
545				550						555					560	
Asn	Pro	Glu	Gly	Ser	Glu	Thr	Ser	Phe	Val	Asp	Ser	Gly	Val	Gly	Gly	
				565					570					575		
Pro	Gln	Gln	Thr	Val	Gly	Glu	Val	Gly	Leu	Pro	Pro	Pro	Leu	Pro	Ser	
			580					585					590			
Ser	Gln	Lys	Asp	Tyr	Leu	Ser	Asn	Lys	Pro	Phe	Lys	Ser	His	Lys	Ser	
		595					600					605				
Cys	Ser	Pro	Ser	Tyr	Lys	Leu	Leu	Asn	Thr	Ala	Val	Pro	Arg	Glu	Met	
		610				615					620					
Lys	Ser	Asn	Thr	Ser	Asp	Pro	Glu	Ile	Lys	Val	Leu	Glu	Glu	Thr	Lys	
625				630						635					640	
Gly	Pro	Ala	Pro	Asp	Pro	Ser	Ala	Gln	Asp	Glu	Leu	Gly	Arg	Thr	Leu	
				645					650					655		
Asp	Gly	Ile	Gly	Glu	Pro	Pro	Glu	His	Cys	Pro	Glu	Thr	Glu	Ala	Val	
			660					665					670			
Ser	Ala	Leu	Ser	Lys	Val	Ile	Ser	Asn	Lys	Cys	Asp	Gly	Val	Cys	Asn	
		675					680					685				
Phe	Pro	Glu	Ser	Ser	Gln	Asn	Ser	Pro	Thr	Gly	Thr	Pro	Gln	Gln	Ala	
		690				695						700				
Gln	Pro	Asp	Ser	Met	Leu	Gly	Val	Pro	Ser	Lys	Cys	Val	Leu	Asp	His	
705				710						715					720	
Ser	Leu	Ser	Thr	Val	Cys	Asn	Pro	Pro	Ser	Ala	Ala	Cys	Gln	Thr	Pro	
			725						730					735		
Leu	Asp	Pro	Ser	Thr	Asp	Phe	Leu	Asn	Gln	Asp	Pro	Ser	Gly	Ser	Val	
			740					745					750			
Ala	Ser	Ile	Ser	His	Gln	Glu	Gln	Leu	Ser	Ser	Val	Pro	Asp	Leu	Thr	
		755						760					765			
His	Gly	Glu	Glu	Asp	Ile	Gly	Lys	Arg	Gly	Asn	Asn	Arg	Asn	Gly	Gln	

770 775 780
 Leu Leu Glu Asn Pro Arg Phe Gly Lys Met Pro Leu Glu Leu Val Arg
 785 790 795 800
 Lys Pro Ile Ser Gln Ser Gln Ile Ser Glu Phe Ser Phe Leu Gly Ser
 805 810 815
 Asn Trp Asp Ser Phe Gln Gly Met Val Thr Ser Phe Pro Ser Gly Glu
 820 825 830
 Ala Thr Pro Arg Arg Leu Leu Ser Tyr Gly Cys Cys Ser Lys Arg Pro
 835 840 845
 Asn Ser Lys Gln Met Arg Ala Thr Gly Pro Cys Phe Gly Gly Gln Trp
 850 855 860
 Ala Gln Arg Glu Gly Val Lys Ser Pro Val Cys Ser Ser His Ser Asn
 865 870 875 880
 Gly His Cys Thr Gly Pro Gly Gly Lys Asn Gln Met Trp Leu Ser Ser
 885 890 895
 His Pro Lys Gln Val Ser Ser Thr Lys Pro Val Pro Leu Asn Cys Pro
 900 905 910
 Ser Pro Val Pro Pro Leu Tyr Leu Asp Asp Asp Gly Leu Pro Phe Pro
 915 920 925
 Thr Asp Val Ile Gln His Arg Leu Arg Gln Ile Glu Ala Gly Tyr Lys
 930 935 940
 Gln Glu Val Glu Gln Leu Arg Arg Gln Val Arg Glu Leu Gln Met Arg
 945 950 955 960
 Leu Asp Ile Arg His Cys Cys Ala Pro Pro Ala Glu Pro Pro Met Asp
 965 970 975
 Tyr Glu Asp Asp Phe Thr Cys Leu Lys Glu Ser Asp Gly Ser Asp Thr
 980 985 990
 Glu Asp Phe Gly Ser Asp His Ser Glu Asp Cys Leu Ser Glu Ala Ser
 995 1000 1005
 Trp Glu Pro Val Asp Lys Lys Glu Thr Glu Val Thr Arg Trp Val Pro
 1010 1015 1020
 Asp His Met Ala Ser His Cys Tyr Asn Cys Asp Cys Glu Phe Trp Leu
 1025 1030 1035 1040
 Ala Lys Arg Arg His His Cys Arg Asn Cys Gly Asn Val Phe Cys Ala
 1045 1050 1055
 Gly Cys Cys His Leu Lys Leu Pro Ile Pro Asp Gln Gln Leu Tyr Asp
 1060 1065 1070
 Pro Val Leu Val Cys Asn Ser Cys Tyr Glu His Ile Gln Val Ser Arg
 1075 1080 1085
 Ala Arg Glu Leu Met Ser Gln Gln Leu Lys Lys Pro Ile Ala Thr Ala
 1090 1095 1100
 Ser Ser
 11051106

<210> 3432

<211> 613

<212> PRT

<213> Homo sapiens

<400> 3432

Met Thr Phe Phe Ser Ser Val Ala Asp Phe Ile Gly Leu Asp Pro Arg
 1 5 10 15
 Ile Ala Ala Trp Leu Ile Asp Pro Ser Asp Ala Thr Pro Ser Phe Glu
 20 25 30
 Asp Leu Val Glu Lys Tyr Cys Glu Lys Ser Ile Thr Val Lys Val Asn
 35 40 45
 Ser Thr Tyr Gly Asn Ser Ser Arg Asn Ile Val Asn Gln Asn Val Arg
 50 55 60
 Glu Asn Leu Lys Thr Leu Tyr Arg Leu Thr Met Asp Leu Cys Ser Lys
 65 70 75 80
 Leu Lys Asp Tyr Gly Leu Trp Gln Leu Phe Arg Thr Leu Glu Leu Pro

				85				90				95				
Leu	Ile	Pro	Ile	Leu	Ala	Val	Met	Glu	Ser	His	Ala	Ile	Gln	Val	Asn	
100								105				110				
Lys	Glu	Glu	Met	Glu	Lys	Thr	Ser	Ala	Leu	Leu	Gly	Ala	Arg	Leu	Lys	
115								120				125				
Glu	Leu	Glu	Gln	Glu	Ala	His	Phe	Val	Ala	Gly	Glu	Arg	Phe	Leu	Ile	
130				135				140								
Thr	Ser	Asn	Asn	Gln	Leu	Arg	Glu	Ile	Leu	Phe	Gly	Lys	Leu	Lys	Leu	
145					150				155				160			
His	Leu	Leu	Ser	Gln	Arg	Asn	Ser	Leu	Pro	Arg	Thr	Gly	Leu	Gln	Lys	
165								170				175				
Tyr	Pro	Ser	Thr	Val	Ser	Glu	Ala	Leu	Asn	Ala	Leu	Arg	Asp	Leu	His	
180								185				190				
Pro	Leu	Pro	Lys	Ile	Ile	Leu	Glu	Tyr	Arg	Gln	Val	His	Lys	Ile	Lys	
195				200				205								
Ser	Thr	Phe	Val	Asp	Gly	Leu	Leu	Ala	Cys	Met	Lys	Lys	Gly	Ser	Ile	
210				215				220								
Ser	Ser	Thr	Trp	Asn	Gln	Thr	Gly	Thr	Val	Thr	Gly	Arg	Leu	Ser	Ala	
225					230				235				240			
Lys	His	Pro	Asn	Ile	Gln	Gly	Ile	Ser	Lys	His	Pro	Ile	Gln	Ile	Thr	
245								250				255				
Thr	Pro	Lys	Asn	Phe	Lys	Gly	Lys	Glu	Asp	Lys	Ile	Leu	Thr	Ile	Ser	
260								265				270				
Pro	Arg	Ala	Met	Phe	Val	Ser	Ser	Lys	Gly	His	Thr	Phe	Leu	Ala	Ala	
275				280				285								
Asp	Phe	Ser	Gln	Ile	Glu	Leu	Arg	Ile	Leu	Thr	His	Leu	Ser	Gly	Asp	
290				295				300								
Pro	Glu	Leu	Leu	Lys	Leu	Phe	Gln	Glu	Ser	Glu	Arg	Asp	Asp	Val	Phe	
305					310				315				320			
Ser	Thr	Leu	Thr	Ser	Gln	Trp	Lys	Asp	Val	Pro	Val	Glu	Gln	Val	Thr	
325								330				335				
His	Ala	Asp	Arg	Glu	Gln	Thr	Lys	Lys	Val	Val	Tyr	Ala	Val	Val	Tyr	
340								345				350				
Gly	Ala	Gly	Lys	Glu	Arg	Leu	Ala	Ala	Cys	Leu	Gly	Val	Pro	Ile	Gln	
355				360				365								
Glu	Ala	Ala	Gln	Phe	Leu	Glu	Ser	Phe	Leu	Gln	Lys	Tyr	Lys	Lys	Ile	
370				375				380								
Lys	Asp	Phe	Ala	Arg	Ala	Ala	Ile	Ala	Gln	Cys	His	Gln	Thr	Gly	Cys	
385					390				395				400			
Val	Val	Ser	Ile	Met	Gly	Arg	Arg	Arg	Pro	Leu	Pro	Arg	Ile	His	Ala	
405								410				415				
His	Asp	Gln	Gln	Leu	Arg	Ala	Gln	Ala	Glu	Arg	Gln	Ala	Val	Asn	Phe	
420								425				430				
Val	Val	Gln	Gly	Ser	Ala	Ala	Asp	Leu	Cys	Lys	Leu	Ala	Met	Ile	His	
435				440				445								
Val	Phe	Thr	Ala	Val	Ala	Ala	Ser	His	Thr	Leu	Thr	Ala	Arg	Leu	Val	
450				455				460								
Ala	Gln	Ile	His	Asp	Glu	Leu	Leu	Phe	Glu	Val	Glu	Asp	Pro	Gln	Ile	
465					470				475				480			
Pro	Glu	Cys	Ala	Ala	Leu	Val	Arg	Arg	Thr	Met	Glu	Ser	Leu	Glu	Gln	
485								490				495				
Val	Pro	Leu	Lys	Val	Ser	Leu	Ser	Ala	Gly	Arg	Ser	Trp	Gly	His	Leu	
500								505				510				
Val	Pro	Leu	Gln	Glu	Ala	Trp	Ala	Leu	Arg	Gln	Ala	His	Val	Ala	Leu	
515				520				525								
Ser	Leu	Pro	Ala	Thr	Ala	Trp	Leu	Pro	Leu	Gly	Pro	Leu	Pro	Ala	Pro	
530				535				540								
Ser	Pro	His	Pro	Cys	Ile	Phe	Arg	Leu	His	Phe	Val	Cys	Ser	Pro	Arg	
545					550				555				560			
Gln	Gln	Trp	Glu	Glu	Arg	Thr	Gly	Phe	Gln	Gln	Ser	Ile	Val	Trp	Pro	
565								570				575				
Ser	Pro	Arg	Ser	Pro	Ala	Leu	Tyr	Ala	Pro	Gly	Arg	Ile	Asn	Pro	Leu	
580								585				590				
Gly	Leu	Gly	Trp	Pro	Ala	Ile	Pro	Trp	Ser	Lys	Cys	Leu	Cys	Lys	Ala	

595
Leu Lys Lys Lys
610 612

600

605

<210> 3433
<211> 339
<212> PRT
<213> Homo sapiens

<400> 3433
Ile Pro Pro Lys Glu Arg Ala Pro Gly Ile Arg Ala Ser Cys Leu Ala
1 5 10 15
Ile Thr Ala Gly Ala Arg Pro Thr Ser Tyr Gly Arg Val Gly Cys Glu
20 25 30
Gly Asp Val Arg Leu Ser Pro Val Ser Pro Leu Leu Ala Pro Pro Asp
35 40 45
Pro Arg Leu Ala Ser Arg Trp Glu Gly Arg Ser Arg Met Lys Gly Lys
50 55 60
Lys Gly Ile Val Ala Ala Ser Gly Ser Glu Thr Glu Asp Glu Asp Ser
65 70 75 80
Met Asp Ile Pro Leu Asp Leu Ser Ser Ser Ala Gly Ser Gly Lys Arg
85 90 95
Arg Arg Arg Gly Asn Leu Pro Lys Glu Ser Val Gln Ile Leu Arg Asp
100 105 110
Trp Leu Tyr Glu His Arg Tyr Asn Ala Tyr Pro Ser Glu Gln Glu Lys
115 120 125
Ala Leu Leu Ser Gln Gln Thr His Leu Ser Thr Leu Gln Val Cys Asn
130 135 140
Trp Phe Ile Asn Ala Arg Arg Arg Leu Leu Pro Asp Met Leu Arg Lys
145 150 155 160
Asp Gly Lys Asp Pro Asn Gln Phe Thr Ile Ser Arg Arg Gly Ala Lys
165 170 175
Ile Ser Glu Thr Ser Ser Val Glu Ser Val Met Gly Ile Lys Asn Phe
180 185 190
Met Pro Ala Leu Glu Glu Thr Pro Phe His Ser Phe Thr Ala Gly Pro
195 200 205
Asn Pro Thr Leu Gly Arg Pro Leu Ser Ala Lys Pro Ser Gln Ser Pro
210 215 220
Gly Ser Val Leu Ala Arg Pro Ser Val Ile Cys His Thr Thr Val Thr
225 230 235 240
Ala Ile Glu Arg Leu Ser Leu Ser Leu Ser Cys Gln Ser Val Gly Cys
245 250 255
Gly Gln Asn Thr Asp Ile Gln Gln Ile Ala Thr Arg Asn Leu Arg Asp
260 265 270
Ser Ser Leu Met Tyr Pro Glu Asp Thr Cys Lys Ser Gly Pro Ser Thr
275 280 285
Asn Thr Gln Ser Gly Leu Phe Asn Thr Pro Pro Pro Thr Pro Pro Asp
290 295 300
Leu Asn Gln Asp Phe Ser Gly Phe Gln Leu Leu Val Asp Val Ala Leu
305 310 315 320
Lys Arg Ala Ala Glu Met Glu Leu Gln Ala Lys Leu Thr Ala
325 330 334

<210> 3434
<211> 408
<212> PRT
<213> Homo sapiens

<400> 3434

Asn Gly Pro Val Pro Pro Gly Gly Ser Lys Thr Lys Trp Ala Gly Gly
 1 5 10 15
 Ser Ala Ala Glu Gly Ser Pro Arg Leu Ser Pro Ser Pro Gly Ala Ala
 20 25 30
 Gln Val Pro Ala Leu Leu Arg Gly Glu Pro Arg Gly Gly Ala Ala Ala
 35 40 45
 Gly Ser Phe Trp Lys Pro Leu His Gln His Ser Cys Gly Leu Arg Pro
 50 55 60
 Pro Pro Pro Pro Asp Arg Leu Ser Arg Leu Pro Gly Lys Thr Leu Ser
 65 70 75 80
 Ala Cys Asp Arg Glu Asn Gly Ala Arg Arg Pro Leu Leu Leu Gly Ser
 85 90 95
 Thr Ser Phe Ile Pro Ile Gly Arg Arg Thr Tyr Ala Ser Ala Ala Glu
 100 105 110
 Pro Val Gly Ser Lys Ala Val Leu Val Thr Gly Cys Asp Ser Gly Phe
 115 120 125
 Gly Phe Ser Leu Ala Lys His Leu His Ser Lys Gly Phe Leu Val Phe
 130 135 140
 Ala Gly Cys Leu Met Lys Asp Lys Gly His Asp Gly Val Lys Glu Leu
 145 150 155 160
 Asp Ser Leu Asn Ser Asp Arg Leu Arg Thr Val Gln Leu Asn Val Cys
 165 170 175
 Ser Ser Glu Glu Val Glu Lys Val Val Gly Asp Cys Pro Leu Glu Pro
 180 185 190
 Glu Gly Pro Glu Lys Gly Met Trp Gly Leu Val Asn Asn Ala Gly Ile
 195 200 205
 Ser Thr Phe Gly Glu Val Glu Phe Thr Ser Leu Glu Thr Tyr Lys Gln
 210 215 220
 Val Ala Glu Val Asn Leu Trp Gly Thr Val Arg Met Thr Lys Ser Phe
 225 230 235 240
 Leu Pro Leu Ile Arg Arg Ala Lys Gly Arg Val Val Asn Ile Ser Ser
 245 250 255
 Met Leu Gly Arg Met Ala Asn Pro Ala Arg Ser Pro Tyr Cys Ile Thr
 260 265 270
 Lys Phe Gly Val Glu Ala Phe Ser Asp Cys Leu Arg Tyr Glu Met Tyr
 275 280 285
 Pro Leu Gly Val Lys Val Ser Val Val Glu Pro Gly Asn Phe Ile Ala
 290 295 300
 Ala Thr Ser Leu Tyr Ser Pro Glu Ser Ile Gln Ala Ile Ala Lys Lys
 305 310 315 320
 Met Trp Glu Glu Leu Pro Glu Val Val Arg Lys Asp Tyr Gly Lys Lys
 325 330 335
 Tyr Phe Asp Glu Lys Ile Ala Lys Met Glu Thr Tyr Cys Ser Ser Gly
 340 345 350
 Ser Thr Asp Thr Ser Pro Val Ile Asp Ala Val Thr His Ala Leu Thr
 355 360 365
 Ala Thr Thr Pro Tyr Thr Arg Tyr His Pro Met Asp Tyr Tyr Trp Trp
 370 375 380
 Leu Arg Met Gln Ile Met Thr His Leu Pro Gly Ala Ile Ser Asp Met
 385 390 395 400
 Ile Tyr Ile Arg
 404

<210> 3435

<211> 918

<212> PRT

<213> Homo sapiens

<400> 3435

Glu Asn Gln Gln Gln Met Leu Val Ala Lys Glu Gln Arg Leu His Phe

1	5	10	15
Leu Lys Gln Gln Glu Arg Arg Gln Gln Gln Ser Ile Ser Glu Asn Glu			
	20	25	30
Lys Leu Gln Lys Leu Lys Glu Arg Val Glu Ala Gln Glu Asn Lys Leu			
	35	40	45
Lys Lys Ile Arg Ala Met Arg Gly Gln Val Asp Tyr Ser Lys Ile Met			
	50	55	60
Asn Gly Asn Leu Ser Ala Glu Ile Glu Arg Phe Ser Ala Met Phe Gln			
	65	70	75
Glu Lys Lys Gln Glu Val Gln Thr Ala Ile Leu Arg Val Asp Gln Leu			
	85	90	95
Ser Gln Gln Leu Glu Asp Leu Lys Lys Gly Lys Leu Asn Gly Phe Gln			
	100	105	110
Ser Tyr Asn Gly Lys Leu Thr Gly Pro Ala Ala Val Glu Leu Lys Arg			
	115	120	125
Leu Tyr Gln Glu Leu Gln Ile Arg Asn Gln Leu Asn Gln Glu Gln Asn			
	130	135	140
Ser Lys Leu Gln Gln Gln Lys Glu Leu Leu Asn Lys Arg Asn Met Glu			
	145	150	155
Val Ala Met Met Asp Lys Arg Ile Ser Glu Leu Arg Glu Arg Leu Tyr			
	165	170	175
Gly Lys Lys Ile Gln Ala Cys Glu Lys Val Phe Leu Asn Arg Val Asn			
	180	185	190
Gly Thr Ser Ser Pro Gln Ser Pro Leu Ser Thr Ser Gly Arg Val Ala			
	195	200	205
Ala Val Gly Pro Tyr Ile Gln Val Pro Ser Ala Gly Ser Phe Pro Val			
	210	215	220
Leu Gly Asp Pro Ile Lys Pro Gln Ser Leu Ser Ile Ala Ser Asn Ala			
	225	230	235
Ala His Gly Arg Ser Lys Ser Ala Asn Asp Gly Asn Trp Pro Thr Leu			
	245	250	255
Lys Gln Asn Ser Ser Ser Val Lys Pro Val Gln Val Ala Gly Ala			
	260	265	270
Asp Trp Lys Asp Pro Ser Val Glu Gly Ser Val Lys Gln Gly Thr Val			
	275	280	285
Ser Ser Gln Pro Val Pro Phe Ser Ala Leu Gly Pro Thr Glu Lys Pro			
	290	295	300
Gly Ile Glu Ile Gly Lys Val Pro Pro Pro Ile Pro Gly Val Gly Lys			
	305	310	315
Gln Leu Pro Pro Ser Tyr Gly Thr Tyr Pro Ser Pro Thr Pro Leu Gly			
	325	330	335
Pro Gly Ser Thr Ser Ser Leu Glu Arg Arg Lys Glu Gly Ser Leu Pro			
	340	345	350
Arg Pro Ser Ala Gly Leu Pro Ser Arg Gln Arg Pro Thr Leu Leu Pro			
	355	360	365
Ala Thr Gly Ser Thr Pro Gln Pro Gly Ser Ser Gln Gln Ile Gln Gln			
	370	375	380
Arg Ile Ser Val Pro Pro Ser Pro Thr Tyr Pro Pro Ala Gly Pro Pro			
	385	390	395
Ala Phe Pro Ala Gly Asp Ser Lys Pro Glu Leu Pro Leu Thr Val Ala			
	405	410	415
Ile Arg Pro Phe Leu Ala Asp Lys Gly Ser Arg Pro Gln Ser Pro Arg			
	420	425	430
Lys Gly Pro Gln Thr Val Asn Ser Ser Ser Ile Tyr Ser Met Tyr Leu			
	435	440	445
Gln Gln Ala Thr Pro Pro Lys Asn Tyr Gln Pro Ala Ala His Ser Ala			
	450	455	460
Leu Asn Lys Ser Val Lys Ala Val Tyr Gly Lys Pro Val Leu Pro Ser			
	465	470	475
Gly Ser Thr Ser Pro Ser Pro Leu Pro Phe Leu His Gly Ser Leu Ser			
	485	490	495
Thr Gly Thr Pro Gln Pro Gln Pro Pro Ser Glu Ser Thr Glu Lys Glu			
	500	505	510
Pro Glu Gln Asp Gly Pro Ala Ala Pro Ala Asp Gly Ser Thr Val Glu			